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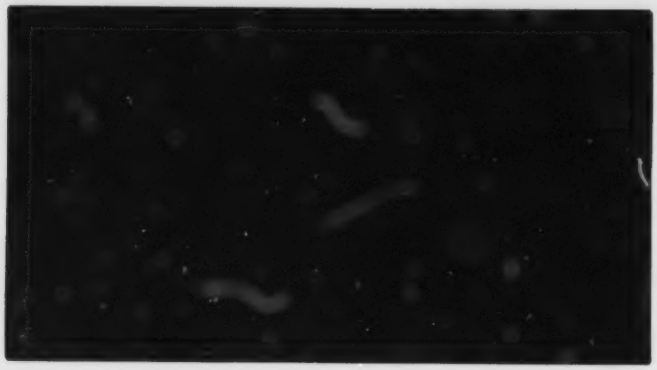

SOE

Strategies and Scientific Methods Division
State of the Environment Reporting Branch
Canadian Wildlife Service

Canada

ENVIRONMENTAL DATABASES FOR STATE OF THE ENVIRONMENT REPORTING: CONSERVATION AND PROTECTION HEADQUARTERS

Report No. 9

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PREFACE

In December 1988, the SOE Reporting Branch began an inventory of Environment Canada databases of potential use to SOE reporting. The inventory, initiated through the SOE departmental Working Group, represents an initial step towards the development of an SOE Information System (database referral component) to be established by Statistics Canada.

This report summarizes the inventory results for Conservation and Protection Headquarters by identifying SOE related databases held in that responsibility centre. With the subsequent addition of information from other responsibility centres (Canadian Parks Service, Atmospheric Environment Service, Regional Offices), a companion volume identifying SOE related databases held by those responsibility centres will be produced. Comments are therefore invited and readers are encouraged to contribute by identifying their data holdings.

ACKNOWLEDGMENTS

We thank the numerous contributors within Conservation and Protection headquarters for supporting this survey by providing information on their databases and data holdings, and suggesting additional databases and information sources for consideration.

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1. INTRODUCTION

State of the environment reporting seeks to systematically analyse, describe and present credible, scientifically based information on environmental conditions and trends. The objective of SOE reporting is to provide Canadians with an integrated, holistic perspective of the state of the Canadian environment, and to indicate the significane of changes in the environment.

Environment reporting is also instrumental for incorporating environmental data into decision making processes related to the economy, human activity and the environment. SOE reporting aims to enhance decision making capabilities by improving the information base which guides management decisions. Thus, the importance of credible data and information on diverse environmental problems, conditions, and trends cannot be overemphasized (15).

The State of the Environment Information System (SOEIS), being developed by Statistics Canada in cooperation with Environment Canada (3, 10, 16, 22), is an important initiative of the SOE program. The SOEIS will help to address and meet the environmental data needs of SOE reporting, which can be summarized as follows:

- to determine data requirements for SOE reporting and identify their sources and data gaps, and;
- to manipulate and present the data in a form appropriate for SOE reporting.

The SOEIS will have two components. The first is a geographically referenced core set of summary socio-economic and environmental statistics using computer based geographic information system technology. The second component is a computerized database referral system. This report will provide input to both. However, some databases identified in this report may not be included in the database referral system. Further evaluation of these databases and their relevance to SOE reporting is required before a decision on inclusion is made.

The purpose of the referral system is to document and facilitate access to information on available environmental databases, guide potential users to this data, increase public avareness about environmental databases, and stimulate interest in, and use of, this information resource. Over the long term, this system has the potential to play a catalytic role in stimulating action towards environmental protection by encouraging cooperation among database managers, identifying gaps in information for critical environmental indicators, identifying needs for additional environmental monitoring, and providing an environmental database organization model for other jurisdictions such as provinces.

2. BACKGROUND

2.1 Credible Environmental Data: The Foundation for SOE Reporting

Accurate state of the environment reporting relies on the systematic analysis of credible, scientifically-based data on environmental conditions and trends (18). There are numerous potential sources of this information including knowledgeable individuals, reports, and databases associated with a variety of governmental and non-governmental organizations

Data most useful for nationally oriented SOE reporting are collected on a national scale to provide truly representative coverage. They will have been collected regularly, over a long period, using consistent, nationally standardized methods. These kinds of data will illustrate variation in space and time, and are appropriate for the analysis of national and regional patterns, trends, and relationships necessary for assessing the state of the environment. In addition, they will likely be useful in a predictive capacity.

Both data on natural resources and processes as well as human activities related to the environment are necessary for assessing the state of the environment. Ideally, a framework should be established to determine which environmental data are of most use in assessing the state of the environment and to organize the resulting databases. Frameworks for organizing environmental data are discussed below.

2.2 Organizing Environmental Data

In general, a framework for organizing environmental data will reveal the relationships among databases currently maintained, identify gaps or data needs, and help ensure that data of most use are collected (i.e. specific purpose of data collection and end use are identified before data are collected). More specifically, a framework is required for organizing the databases in this inventory in a manner which reflects the needs of SOE reporting.

Numerous database directories, data source publications and reports were revieved (eg. 4, 5, 6, 7, 20, 25) that illustrate the many ways of organizing environmental data. Each has its own merits and applicability depending on the reason each was established. For example, environmental data could be organized by responsibility centre (eg. federal government departments), geographically (eg. watersheds, ecoregions), by environmental medium (eg. air, water, land), or by an integrated approach such as the STRESS framework. This latter framework groups datasets by categorizing the relationships between humans and the other elements of the ecosystem, and most closely fits the needs of SOE reporting (8, 12, 19, 23).

The framework used in this report for organizing databases is derived from the STRESS framework, as modified by the Stakeholder Group on Environmental Reporting (8) and the SOE Reporting Branch (17). The entire framework is outlined in Appendix 4, while Appendix 1 lists the databases identified in this report by framework category. Below, the four major categories of environmental data are briefly described:

I. Environmental Assets

This category includes information on natural resources such as water, land, fisheries, forests, non-renewable resources, climate and the oceans. Details on stock supply, location, population characteristics, meteorological statistics and oceanographic statistics would be found in databases in this group.

II. Agents of Environmental Change

Many natural and anthropogenic factors influence the environment and result in environmental change. Information on diverse natural and socio-economic stress activities would be provided in this section. Examples include floods and earthquakes, the generation and disposal of wastes, environmental restructuring activities, and harvesting/depletion of renewable and non-renewable resources.

III. Environmental Quality

This category groups actual measures of environmental quality, and covers topics such as air quality (levels and trends of pollutants); food (contaminants); human health and exposure (toxic substance analysis); soil quality (erosion, salinization); precipitation (acid deposition); forests (depletion); and landscape (loss of wetland, agricultural land conversion, protected areas).

IV. Other

This group contains information that may not be of direct use to SOE reporting, but may be manipulated or used to provide an indirect indication of the relative state of the environment. For example, the database that provides an inventory of non-ferrous foundries (p. 164) presently contains no environmental data; however, by knowing the processes used and production volume, it is possible that useful waste statistics could be estimated. Another example from this category is the Chemical Evaluation Database (p. 154). Using the references described in this bibliographic database, a general indication of toxic substance use (number of priority substances included in the database), the rate of addition of new substances or substance popularity might be obtained.

3. DATABASE INVENTORY: OBJECTIVES AND LIMITATIONS

The SOE database inventory is being conducted to identify databases held in Environment Canada that are of potential direct or indirect value to SOE reporting and the database referral system.

There are several limitations of this inventory relevant to SOE reporting:

- no effort was made to assess the reliability or quality of data within the databases from an SOE perspective.
- the significance of individual databases for SOE reporting was not evaluated. Database selection criteria were employed to select databases (see 4.2), but databases of indirect relevance to SOE reporting were also identified and included in this report.
- this inventory covers only environmental databases, not reports, publications or other sources of environmental information that might be of use to SOE reporting or of interest for the referral system.

4. CONDUCTING THE INVENTORY

4.1 Database Identification

Based on examples from other database surveys and personal communication with others who have conducted similar surveys*, a survey form was designed for recording all relevant information on databases from an SOE viewpoint (Appendix 5).

Individuals knowledgeable on databases in Conservation and Protection headquarters were identified and an information package (17) was sent to them outlining the purpose of the inventory, guidelines for database selection, a sample completed questionnaire, and an overview of the database organizational framework. At the same time, a review of numerous published listings of environmental databases and environmental information sources and the results of previous efforts to inventory databases in Environment Canada (1, 2, 4, 5, 6, 7, 9, 11, 13, 14, 20, 21, 24, 26, 27) was conducted to prepare a preliminary list of relevant databases and prefill, to the extent possible, survey forms.

Individuals to whom information packages were sent were contacted and asked to review the partially completed forms for accuracy

* (eg. C. Spencer, Environmental Quality Division, Environmental Protection, Atlantic Region)

and to identify additional relevant information, databases and contacts. Typed, completed forms (Appendix 3) were returned to the appropriate database managers for final verification.

4.2 Database Selection Criteria

Databases were selected for their potential significance for SOE reporting. Databases of direct relevance to SOE reporting (eg. National Air Pollution Surveillance Network- p.134) were preferred over those of indirect relevance (eg. Domestic Substances List- p.159, Chemical Profiles Database- Schedule II Transportation of Dangerous Goods- p.157).

Databases of national geographic coverage or covering a region of national significance were included. Examples of nationally important regional areas include the Niagara River, St. Lawrence River, the North, the agricultural prairie region, the Fraser River estuary. A database on water quality in the Gatineau River, for example, would not be considered of national significance. It should be recognized, however, that the geographic coverage criteria are not rigidly fixed, and should be used only as guidelines.

Regularly updated databases where temporal trends could be examined were preferred to single time-frame databases, although these were also accepted as they can be useful in providing a baseline against which future data can be compared.

Databases stored in machine readable format, in paper files or by any other means were included.

5. ENVIRONMENTAL DATABASES FOR SOE REPORTING: CONSERVATION AND PROTECTION HEADQUARTERS

The results of the database inventory are summarized in Appendices 1, 2, and 3. Appendix 1 lists the 55 databases and/or datafiles relevant to SOE reporting held in Conservation and Protection headquarters by STRESS framework category, Appendix 2 lists the databases by responsibility centre, while Appendix 3 contains detailed database descriptions organized by STRESS framework category.

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APPENDIX 1

SOE DATABASE INVENTORY SUMMARY BY STRESS FRAMEWORK CATEGORY

Framework Category and Databases	No. of* Databases	Page
I. **ENVIRONMENTAL ASSETS**	22	21
A. Water Resources	3	
Aquaref (WPM)**		21
D-Ref (WPM)		24
National Hydrometric Data Bank (WR)		27
B. Land Resources	5	
Canada Geographic Information System (SD) (Agricultural Land Capability)		30
Canada Geographic Information System (SD) (Forestry Land Capability)		33

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*Note: Databases covering more than one category are listed under each category covered (eg. Landbase); the sum of the number of databases in all four categories is larger than the total number of databases inventoried since some are listed several times.

** Conservation and Protection Headquarters Branch Abbreviations

Canadian Wildlife Service Directorate

MBWC = Migratory Birds and Wildlife Conservation Branch
SOE = State of the Environment Reporting Branch
SD = Sustainable Development Branch
WTS = Wildlife Toxicology and Surveys Branch

Environmental Protection Directorate

CCB = Commercial Chemicals Branch
IPB = Industrial Programs Branch
MEB = Management and Emergencies Branch
TDTS = Technology Development and Technical Services Branch

Inland Waters Directorate

WPM = Water Planning and Management Branch
WQB = Water Quality Branch
WR = Water Resources Branch

Framework Category and Databases	No. of Databases	Page
Canada Geographic Information System (SD) (Recreational Land Capability)		36
Canada Geographic Information System (SD) (Ungulate Land Capability)		39
Canada Geographic Information System (SD) (Waterfowl Land Capability)		42
C. Forests		
D. Fish		
E. Wildlife	7	
Avian Census Plots (MBWC)		45
Avian Use of Agrohabitats (WTS)		47
Bird Banding and Recovery Database (WTS)		50
Bird Names (MBWC)		52
Co-operative Breeding Bird Survey (WTS)		54
Migratory Game Bird Population Status (MBWC)		57
Spring Breeding Grounds Survey-Eastern Canada (WTS)		59
F. Non-renewable Resources		
G. Climate		
H. Oceans		
I. General (multi-category databases)	7	
Canada Geographic Information System (SOE)		61
Canada Geographic Information System (SD) (Ecological Land Classification)		64
Canada Geographic Information System (SOE) (National Parks)		67
Ecoclimatic Provinces and Regions of Canada Database (SD)		70
Federal Land Database (SD)		73
Landbase (SD)		76
Northern Land Use (SD)		78

Framework Category and Databases	No. of Databases	Page
II. AGENTS OF ENVIRONMENTAL CHANGE	25	81
A. Waste Generation and Disposal (by sector/substance)	18	
1. Mining and Smelting	3	
Mine Compliance Data (IPB)		81
Non-ferrous Smelters Database (IPB)		84
Nuclear Data System (IPB)		86
2. Manufacturing	4	
Ferrous Foundry Database (IPB)		88
Industrial Water Use Database (WPM)		90
Municipal and Industrial Strategy for Abatement-Iron and Steel Industry Database (IPB)		93
Pulp and Paper Mill Profile System (IPB)		95
3. Municipal	2	
Municipal Water Use Database (WPM)		98
Municipal Waterworks and Wastewater Systems Data (IPB)		100
4. Energy		
5. Transportation	1	
National Analysis of Trends in Emergencies System (MEB)		103
6. PCBs	3	
Canadian Council of Resource and Environment Ministers-National PCB Inventory (IPB)		106
Restricted Information System for Chemicals-Ontario Region PCB Inventory (CCB)		109

Framework Category and Databases	No. of Databases	Page
Restricted Information System for Chemicals-Quebec Region PCB Inventory (CCB)		112
7. Stored Waste	1	
Register of Underground Storage Tanks and Systems on Federal Property (MEB)		115
8. Ocean Dumping	2	
Ocean Dumping Database System (MEB)		117
Ocean Dumping Permit System (MEB)		120
9. Emissions - Air	2	
Compendium (MEB)		123
Residual Discharge Information System (MEB)		125
B. Environmental Restructuring	1	
1. Buildings		
2. Transportation		
3. Agriculture		
4. Energy		
5. Urbanization	1	
Canada Geographic Information System (Urban Centred Regions)		127
C. Harvesting	2	
1. Fisheries		
2. Agriculture	1	
Landbase (SD)		76
3. Forestry		
4. Hunting and Trapping	1	
National Harvest Surveys (WTS)		130

Framework Category and Databases	No. of Databases	Page
D. Depletion of Non-renewable Resources		
E. Natural Activity		
F. Pesticide Applications	1	
Pesticide Registrant Survey (CCB)		132
G. General (multi-category databases)	3	
Canada Geographic Information System (SOE)		61
Federal Land Database (SD)		73
Northern Land Use (SD)		78
III. ENVIRONMENTAL QUALITY	13	134
A. Air	1	
National Air Pollution Surveillance Network (TDTS)		134
B. Water	3	
Aquaref (WPM)		21
D-Ref (WPM)		24
National Water Quality Database (WQB)		137
C. Food		
D. Human Health and Exposure		
E. Soil		
F. Precipitation		
G. Wildlife Populations (plants and animals)	3	
Committee on the Status of Endangered Wildlife in Canada Database (MBWC)		140
National Registry of Toxic Chemical Residues (WTS)		143
Threatened and Endangered Species (WTS)		146
H. Forests		

Framework Category and Databases	No. of Databases	Page
I. Landscape	1	
Canada Geographic Information System (Fruitlands) (SD)		148
J. Perceptions	1	
Importance of Wildlife to Canadians (SD)		151
K. General (multi-category databases)	4	
Canada Geographic Information System (SOE)		61
Federal Land Database (SD)		73
Landbase (SD)		76
Northern Land Use (SD)		78
IV. **OTHER DATABASES** (databases indirectly related SOE evaluation)	8	154
Chemical Evaluation Database (CCB)		154
Chemical Profiles Database-Schedule II Transportation of Dangerous Goods (IPB)		157
Domestic Substances List (CCB)		159
Fuel Additives Database (IPB)		162
Inventory of Canadian Non-ferrous Foundries (IPB)		164
Lead Additives in Gasoline (CCB)		166
Sulphur Content in Liquid Fuels (IPB)		168
CCREM Environmental Protection Research and Development Inventory		170

APPENDIX 2

SOE DATABASE INVENTORY SUMMARY BY RESPONSIBILITY CENTRE

Responsibility Centre and Databases	No. of Databases	Page
CANADIAN WILDLIFE SERVICE DIRECTORATE	23	
MIGRATORY BIRDS AND WILDLIFE CONSERVATION BRANCH (MBWC)	4	
Avian Census Plots		45
Bird Names		52
Committee on the Status of Endangered Wildlife in Canada Database		140
Migratory Game Bird Population Status		57
STATE OF THE ENVIRONMENT REPORTING BRANCH (SOE)	2	
Canada Geographic Information System		61
Canada Geographic Information System (National Parks)		67
SUSTAINABLE DEVELOPMENT BRANCH (SD)	13	
Canada Geographic Information System (Forestry Land Capability)		33
Canada Geographic Information System (Agricultural Land Capability)		30
Canada Geographic Information System (Ungulate Land Capability)		39
Canada Geographic Information System (Waterfowl Land Capability)		42
Canada Geographic Information System (Recreational Land Capability)		36
Canada Geographic Information System (Ecological Land Classification)		64
Canada Geographic Information System (Urban Centred Regions)		127
Canada Geographic Information System (Fruitlands)		148
Ecoclimatic Provinces and Regions of Canada Database		70
Federal Land Database		73
Importance of Wildlife to Canadians		151
Landbase		76
Northern Land Use		78
WILDLIFE TOXICOLOGY AND SURVEYS BRANCH	7	
Spring Breedings Grounds Survey-Eastern Canada		59
National Registry of Toxic Chemical Residues		143
Threatened and Endangered Species		146

Responsibility Centre and Databases	No. of Databases	Page
WILDLIFE TOXICOLOGY AND SURVEYS BRANCH (WTS)		
Avian Use of Agrohabitats		47
Bird Banding and Recovery Database		50
Co-operative Breeding Bird Survey		54
National Harvest Surveys		130
ENVIRONMENTAL PROTECTION DIRECTORATE	26	
COMMERCIAL CHEMICALS BRANCH (CCB)	6	
Chemical Evaluation Database		154
Domestic Substances List		159
Lead Additives in Gasoline		166
Pesticide Registrant Survey		132
Restricted Information system for Chemicals-Ontario Region PCB Inventory		109
Restricted Information System for Chemicals-Quebec Region PCB Inventory		112
INDUSTRIAL PROGRAMS BRANCH (IPB)	12	
Canadian Council of Resource and Environment Ministers-National PCB Inventory		106
Chemical Profiles Database-Schedule II Transportation of Dangerous Goods		157
Ferrous Foundry Database		88
Fuel Additives Database		162
Inventory of Canadian Non-ferrous Foundries		164
Mine Compliance Data		81
Municipal and Industrial Strategy for Abatement-Iron and Steel Industry Database		93
Municipal Waterworks and Wastewater Treatment System Data		100
Non-ferrous Smelters Database		84
Nuclear Data System		86
Pulp and Paper Mill Profile System		95
Sulphur Content in Liquid Fuels		168
MANAGEMENT AND EMERGENCIES BRANCH (MEB)	6	
Compendium		123
National Analysis of Trends in Emergencies System		103
Ocean Dumping Database System		117
Ocean Dumping Permit System		120
Register of Underground Storage Tanks and Systems on Federal Property		115
Residual Discharge Information System		125

Responsibility Centre and Databases	No. of Databases	Page
TECHNOLOGY DEVELOPMENT AND TECHNICAL SERVICES BRANCH (TDTS)	2	
National Air Pollution Surveillance Network		134
CCREM Environmental Protection Research and Development Inventory		170
INLAND WATERS DIRECTORATE	6	
WATER PLANNING AND MANAGEMENT BRANCH (WPM)	4	
Aquaref		21
D-Ref		24
Industrial Water Use Database		90
Municipal Water Use Database		98
WATER QUALITY BRANCH (WQB)	1	
National Water Quality Database		137
WATER RESOURCES BRANCH (WR)	1	
National Hydrometric Data Bank		27

APPENDIX 3

DATABASE DESCRIPTIONS
ORGANIZED BY STRESS FRAMEWORK CATEGORY

DATABASE: AQUAREF

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

A bibliographic database referencing English and French documents on Canadian Water resources and other related environmental topics.

b) **Purpose of the Database**

Provide access to references pertaining to water resources literature produced by the Inland Waters Directorate, Environment Canada, and other agencies involved in water research.

3. a) **Name and Address of Responsible Organisation**

WATDOC, Water Planning and Management Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Louise Power (819) 997-2324

c) **Access Mechanisms**

Searchable online through CAN/OLE, a retrieval system offered by the Canada Institute for Scientific and Technical Information (CISTI), availabe via the DATAPAC communications network.

4. a) **Parameters Measured (summarize if too extensive)**

Subject coverage:

- water resources, surface water and groundwater
- sedimentation and erosion
- flooding
- hydrometeorology
- agricultural hydrology
- forest hydrology
- satellite hydrology
- ice, snow and glaciers
- pollution
- habitats
- environmental impact assessment

b) **Geographic Coverage**

National, more than 69,000 references

DATABASE: AQUAREF

c) **Data Acquisition Method(s)**

Reports, studies, conference proceedings and papers are indexed; over 65 Canadian and foreign journals are regularly monitored.

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

1970 - present

f) **Update Frequency**

Bi-monthly, on CAN/OLE

g) **Database Hardware/Software Configuration**

Mainframe computer at the National Research Council for use of CAN/OLE and in-house database production on microcomputer with IMMAGIC software.

h) **Output Format(s) (tables, maps, etc.)**

Search results can be viewed online or printed offline at CISTI.

5. **Restrictions and Conditions**

None

6. **Price Information**

CAN/OLE: $40 per online connect hour.

7. **Corresponding Printed Sources**

WATDOC produces bibliographies and inventories from subsets of the AQUAREF database; the printed sources are produced on the basis of the needs of the contributing organizations (see 11).

8. **Languages**

Bibliographic references to documents published in English and/or French.

9. **User Aids Available**

1. WATDOC newsletter (new database developments and user information).
2. CAN/OLE user manual (see 11).

10. **Suggested Keywords**

Water resources bibliographic database

DATABASE: AQUAREF

11. **Additional Information**

1. The following is a sample bibliography: 1986-87 Bibliography, In: Hydrological events, Vol. 13, No. 3, p.446. (published in 1988 by WATDOC).

2. Any ASCII type terminal which can communicate in half-duplex at a speed of 10, 30 or 120 characters per second is compatible with CAN/OLE. Searches that generate a large number of references can be printed off line at the computer site.

3. Contracts can be arranged and the user manual may be obtained by contacting Client Services, CAN/SDI, CISTI, National Research Council, Ottawa, Ontario, K1A 0S2, (613) 993-1210.

May 1989

DATABASE: D-REF (DATA REFERENCE)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

An up-to-date reference system to computerized and non-computerized data collections and data handling systems pertaining to water resources in Canada.

b) **Purpose of the Database**

To describe data collection and data handling systems pertaining to water resources in Canada.

3. a) **Name and Address of Responsible Organisation**

WATDOC, Water Planning and Management Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario, K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Ron Gauthier (819) 953-1531

c) **Access Mechanisms**

D-REF will eventually be mounted on CAN/OLE, a retrieval system offered by the Canada Institute for Scientific and Technical Information (CISTI), available via the DATAPAC communications network.

4. a) **Parameters Measured (summarized if too extensive)**

For each database:

- name of data collection
- description of data collection
- data category (physiographic, biological, groundwater, water quality, water use, stream flow, water level, etc.)
- language
- keywords
- publications derived from, or useful in, analyzing data
- funding agency
- contact, fees
- purpose or objectives
- parameters measured
- period of record
- sampling frequency
- update frequency
- geographical area where data are collected, latitude, longtitude
- hardware/software, output information
- reference source code

DATABASE: D-REF (DATA REFERENCE)

b) **Geographic Coverage**

All provinces and territories.

c) **Data Acquisition Method(s)**

Database questionnaires and personal interviews within the department, as well as with other governmental, academic and private organizations dealing with water resources.

d) **Geographic Unit(s) of Measurement**

Varies among the data collections.

e) **Period of Record**

Early 1900's - present

f) **Update Frequency**

Irregular.

g) **Database Hardware/Software Configuration**

In house microcomputer with IMMAGIC software.

h) **Output Format(s) (tables, maps, etc.)**

Text

5. **Restrictions and Conditions**

None

6. **Price Information**

Not yet determined

7. **Corresponding Printed Sources**

Eventually, a summary of data holdings will be printed from subsets of the D-REF database, with annual updates.

8. **Languages**

Description of reference is entered in the language in which the input form was completed.

9. **User Aids Available**

1. DREF Guidelines and input specifications

2. WATDOC Newsletter (new database developments, user information).

DATABASE: D-REF (DATA REFERENCE)

10. **Suggested Keywords**

Water resources referral database

11. **Additional Information**

1. This database is being redesigned and will become operational during 1989.

2. It is planned that this database will be mounted on CAN/OLE, the national online retrieval system operated by the Canada Institute for Scientific and Technical Information, National Research Council of Canada, Ottawa, Ontario, K1A 0S2.

3. Publications in 7 and 9 (1) are available from the responsible organization.

May 1989

DATABASE: NATIONAL HYDROMETRIC DATA BANK (HYDAT)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from a Canadian network of stations daily monitoring streamflow, lake level and sediment data.

b) **Purpose of the Database**

To collect information on Canada's water resources for planning and management.

3. a) **Name and Address of Responsible Organisation**

Water Resources Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Doug Kirk (819) 953-1564

c) **Access Mechanisms**

Through the responsible organization. An interactive capability is available.

4. a) **Parameters Measured (summarized if too extensive)**

Daily information for lakes or streams on one or more of the following parameters:

- streamflow
- water level
- water temperature
- suspended sediment concentration
- sediment particle size
- sediment load
- ice conditions
- bed material

b) **Geographic Coverage**

National, 3,400 active sites and about 4,200 discontinued sites, all provinces and territories represented.

c) **Data Acquisition Method(s)**

Individual monitoring stations.

d) **Geographic Unit(s) of Measurement**

Site specific measurements for watersheds.

e) **Period of Record**

1900 - present.

f) **Update Frequency**

Once per year minimum; most recent data available at headquarters approximately six months after collection; current and original records available from regional offices.

g) **Database Hardware/Software Configuration**

Mainframe CYBER computer using custom software; data stored on magnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Tables of numbers.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge to view data books at water survey of Canada offices or at libraries; data books, hard copy sheets or magnetic tapes available at direct incremental cost of provision.

7. **Corresponding Printed Sources**

Annual data books.

8. **Languages**

Reports are available in English and French.

9. **User Aids Available**

1. Supplying hydrometric and sediment data to users.
2. Surface water data reference index, 1988.
3. Sediment data reference index, 1987.

10. **Suggested Keywords**

Water resources - streams
Watersheds
Water-physical properties

DATABASE: NATIONAL HYDROMETRIC DATA BANK (HYDAT)

11. **Additional Information**

1. Database located at the Department of Energy, Mines and Resources, 580 Booth Street, Ottawa, Ontario K1A 0E4.

2. Monthly data summaries are also available.

3. Data on all parameters are not necessarily available for all sites.

4. Data are being put on compact discs which should be available by June 1990.

5. Publications in 9 are available from IWD Publications, Conservation and Protection, Environment Canada, 8th Floor, Place Vincent Massey, Ottawa, Ontario K1A 0H3.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - AGRICULTURAL LAND CAPABILITY

1. **Datafile Name(s)**

Canada Land Inventory, Land Capability for Agriculture.

2. a) **Summary Description of Contents**

Database at 1:250,000 and 1:1,000,000 scales indicating agricultural capability classes based on soil potential and limitations for agricultural use in southern Canada.

b) **Purpose of the Database**

To determine the capability of land for agriculture for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (address in 3a) (819) 953-1443
Ms. Connie MacDonald, Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3. (819) 953-1454

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- limitations (adverse climate, erosion damage, inundation, stoniness, shallowness of soil, adverse soil characteristics, adverse topography, excess water, a combination of above limitations)
- land capability for agriculture (at least 8 classes)
- mineral soils (classified according to potential and limitations for agriculture)
- organic soils (may or may not be placed in capability classes, depending upon area being covered)

b) **Geographic Coverage**

Most of southern Canada at a scale of 1:250,000 and 1:1,000,000.

c) **Data Acquisition Method(s)**

Data from compiled maps based on field surveys.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) AGRICULTURAL LAND CAPABILITY

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

Data collection initiated in the mid 1960's; database developed in 1970's.

f) **Update Frequency**

No further work with this database is planned.

g) **Database Hardware/Software Configuration**

Mainframe computer with SPANS software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11).

5. **Restrictions and Conditions**

None.

6. **Price Information**

Costs for data and services are determined by CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. Various maps.
2. Reports (climate and agriculture, 1966; soil capability (see 9)).

8. **Languages**

Maps are bilingual. All reports are in English; some are in French.

9. **User Aids Available**

Specific to database:
Soil capability classification for agriculture. Report No.2, 1972.

General:

1. EIS Summary catalogue of data holdings.
2. CLDS/CGIS Catalogue of reports.

10. **Suggested Keywords**

Land capability - agriculture
Environmental Restructuring - agriculture

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - AGRICULTURAL LAND CAPABILITY

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. Reports, maps and catalogues are available from the responsible agency.

3. This database is an inventory of agricultural capability that could be used as baseline information. GIS capability can be used to examine relationships with other environmental parameters.

4. In addition to the federal publications the provinces also have prepared maps and reports from the database.

5. Based on synthesis of the land capability databases (forestry, agriculture, recreation, wildlife), land capability analysis and critical capability areas information is available and has been mapped at scales of 1:250,000 and 1:1,000,000 respectively.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTSEM (CGIS) FORESTRY LAND CAPABILITY

1. **Datafile Name(s)**

Canada Land Inventory - Land Capability for Forestry.

2. a) **Summary Description of Contents**

Database at 1:250,000 and 1:1,000,000 indicating forestry capability classes based on land suitability for growing commerical timber in southern Canada.

b) **Purpose of the Database**

To determine the capability of land for forestry for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A OH3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (address in 3a) (819) 953-1443
Ms. Connie MacDonald, Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario K1A OH3. (819) 953-1454.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Areas covered are described in terms of:

- capability for growing commercial timber (7 classes)
- limitations
  . climate (4 subclasses)
  . soil moisture (4 subclasses)
  . soil permeability and depth (8 subclasses)
- tree species expected to yield in commercially viable volumes

b) **Geographic Coverage**

Most of southern Canada at 1:250,000 and 1:1,000,000.

c) **Data Acquisition Method(s)**

Data from compiled maps based on field surveys.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - FORESTRY LAND CAPABILITY

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

Data collection initiated in early 1960's; database developed in 1970's.

f) **Update Frequency**

No further work with this database is planned.

g) **Database Hardware/Software Configuration**

Mainframe computer with SPANS software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11).

5. **Restrictions and Conditions**

None.

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. Various maps
2. Reports (Economics of plantations in southern Ontario; Forestry capability (see 9)).

8. **Languages**

Maps are bilingual. All reports are in English; some are in French.

9. **User Aids Available**

Specific to database:

Land and capability classification for forestry. Report No.4, 1970.

General:

1. EIS summary catalogue of data holdings.
2. CLDS/CGIS catalogue of reports.
3. EIS summary catalogue of SPANS databases.
4. EIS digital data file formats.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - FORESTRY LAND CAPABILITY

10. **Suggested Keywords**

Land capability - forestry
Environmental restructuring - forestry

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. Reports, maps and catalogues are available from the responsible agency.

3. This database is an inventory of forestry capability that could be used as baseline information. GIS capability can be used to examine relationships with other environmental parameters.

4. In addition to the federal publications, the provinces also have prepared maps and reports from the database.

5. Based on a synthesis of the land capability databases (forestry, agriculture, recreation, wildlife), land capability analysis and critical capability areas information is available and has been mapped at scales of 1:250,000 and 1:1,000,000 respectively.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - RECREATIONAL LAND CAPABILITY

1. **Datafile Name(s)**

Canada Land Inventory - Land capability for Recreation

2. a) **Summary Description of Contents**

Database at 1:250,000 and 1:1,000,000 showing land capability for recreation in southern Canada.

b) **Purpose of the Database**

To determine the suitability of land for outdoor recreation for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (address in 3a) (819) 953-1443
Ms. Connie MacDonald, Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario K1A 0H3. (819) 953-1454.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- land suitability (7 classes)
- features providing recreational opportunities (3-25 subclasses).

b) **Geographic Coverage**

Most of southern Canada at 1:250,000 and 1:1,000,000.

c) **Data Acquisition Method(s)**

Data from compiled maps based on field surveys.

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

Data collection initiated in early 1960's; database developed in 1970's.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - RECREATIONAL LAND CAPABILITY

f) **Update Frequency**

No further work with this database is planned.

g) **Database Hardware/Software Configuration**

Mainframe computer with SPANS software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11).

5. **Restrictions and Conditions**

None.

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. Maps (see 4b)
2. Reports (Recreation capability (see 9)).

8. **Languages**

Maps are bilingual. All reports are in English; some are in French.

9. **User Aids Available**

Specific to database:

Land capability for recreation summary report. Report No.14, 1978.

General:

1. EIS summary catalogue of data holdings.
2. CLDS/CGIS catalogue of reports.
3. EIS summary catalogue of SPANS databases.
4. EIS digital data file formats.

10. **Suggested Keywords**

Recreation - Land capability

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. Reports, maps and catalogues are available from the responsible agency.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - RECREATIONAL LAND CAPABILITY

3. This database is an inventory of recreational capability that could be used as baseline information. GIS capability can be used to examine relationships with other environmental parameters.

4. In addition to the federal publications, the provinces also have prepared maps and reports from the database.

5. Based on synthesis of the land capability databases (forestry, agriculture, recreation, wildlife), land capability analysis and critical capability areas information is available and has been mapped at scales of 1:250,000 and 1:1,000,000.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - UNGULATE LAND CAPABILITY

1. **Datafile Name(s)**

Canada Land Inventory - Land Capability for Wildlife (ungulates)

2. a) **Summary Description of Contents**

Databases at 1:250,000 and 1:1,000,000 showing the capability of land to support ungulate wildlife in southern Canada.

b) **Purpose of the Database**

To determine the capability of land for ungulates for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario, K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (address in 3a) (819) 953-1443
Ms. Connie MacDonald, Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario, K1A 0H3. (819) 953-1454.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- Land capability for ungulate support (7 classes)
  . winter ranges (3 classes)
  . species indicators (assigned for antelope, caribou, deer, elk, mountain goat, moose, mountain sheep)
  . limitations (climate factors, land characteristics)

b) **Geographic Coverage**

Most of southern Canada at 1:250,000 and 1:1,000,000.

c) **Data Acquisition Method(s)**

Data from computerized maps based on field surveys.

d) **Geographic Unit(s) of Measurement**

Not applicable

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - UNGULATE LAND CAPABILITY

e) **Period of Record**

Data collection initiated in early 1960's; database developed in 1970's.

f) **Update Frequency**

No further work with this database is planned.

g) **Database Hardware/Software Configuration**

Mainframe computer with SPANS software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11).

5. **Restrictions and Conditions**

None

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Printed Sources**

1. Various maps
2. Reports (wildlife capability (see 9)).

8. **Languages**

Maps are bilingual. All reports are in English; some are in French.

9. **User Aids Available**

Specific to database:
1. Land capability classification wildlife Report No. 7, 1969.
2. Land capability classification for wildlife - ungulates, 1980.

General:

1. EIS summary catalogue of data holdings.
2. CLDS/CGIS catalogue of reports.
3. EIS summary catalogue of SPANS databases.
4. EIS digital data file formats.

10. **Suggested Keywords**

Wildlife - ungulates
Land capability - ungulates

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - UNGULATE LAND CAPABILITY

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. Reports, maps and catlogues are available from the responsible agency.

3. This database is an inventory of ungulate land use capability that could be used as baseline information; GIS capability can be used to examine relationships with other environmental parameters.

4. In addition to the federal publications, the provinces also have prepared maps and reports from the database.

5. Based on synthesis of the land capability databases (forestry, agriculture, recreation, wildlife), land capability analysis and critical capability areas information is available and has been mapped at scales of 1:250,000 and 1:1,000,000 respectively.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - WATERFOWL LAND CAPABILITY

1. **Datafile Name(s)**

Canada Land Inventory - Land Capability for Wildlife (waterfowl)

2. a) **Summary Description of Contents**

Database at 1:250,000 and 1:1,000,000 showing the capability of land to support waterfowl in southern Canada.

b) **Purpose of the Database**

To determine the capability of land to support waterfowl for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario, K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (address in 3a) (819) 953-1443
Ms. Connie MacDonald, Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario K1A 0H3. (819) 953-1454.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- capability for waterfowl support (6 classes)
- important migration stops or wintering areas (4 classes)
- limitations (aridity, free flowing water, climate, fertility, landform, inundation, reduced marsh edge, soil moisture, adverse soil and water characteristics, soil depth, adverse topography, water depth).

b) **Geographic Coverage**

Most of southern Canada at 1:250,000 and 1:1,000,000.

c) **Data Acquisition Method(s)**

Data from computerized maps based on field surveys.

d) **Geographic Unit(s) of Measurement**

Not applicable

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - WATERFOWL LAND CAPABILITY

e) **Period of Record**

Data collection initiated in early 1960's; database developed in 1970's.

f) **Update Frequency**

No further work with this database is planned.

g) **Database Hardware/Software Configuration**

Mainframe computer with SPANS software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11).

5. **Restrictions and Conditions**

None

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. Maps (see 4b).
2. Report (wildlife capability) (see 9).

8. **Languages**

Maps are bilingual. All reports are in English and some are also available in French.

9. **User Aids Available**

Specific database:

1. Land capability classification for wildlife. Report No. 7, 1969.
2. Land capability classification for wildlife - waterfowl, 1980.

General:

1. EIS summary catalogue of data holdings.
2. CLDS/CGIS catalogue of reports.
3. EIS summary catalogue of SPANS databases.
4. EIS digital data file formats.

10. **Suggested Keywords**

Wildlife - waterfowl
Land capability - waterfowl

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - WATERFOWL LAND CAPABILITY

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. Reports, maps and catalogues are available from the responsible agency.

3. This database is an inventory of ungulate land use suitability that could be used as baseline information; GIS capability can be used to examine relationships with other environmental parameters.

4. In addition to the federal publications, the provinces also have prepared maps and reports from the database.

5. Based on synthesis of the land capability databases (forestry, agriculture, recreation, wildlife), land capability analysis and critical capability areas information is available and has been mapped at scales of 1:250,000 and 1:1,000,000.

May 1989

DATABASE: AVIAN CENSUS PLOTS

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Non-game bird counts on permanent plots in various habitat types across Canada.

b) **Purpose of the Database**

To monitor long-term trends in abundance of non-game birds.

3. a) **Name and Address of Responsible Organisation**

Migratory Bird Conservation Division, Migratory Birds and Wildlife Conservation Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario, K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Kathy Dickson (819) 953-1415

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- habitat characteristics of the study plot (dominant tree, ground cover plant species)
- density of breeding pairs by species

b) **Geographic Coverage**

National, primarily in settled areas.

c) **Data Acquisition Method(s)**

Surveys conducted by volunteers using the territory mapping technique, and data submitted for inclusion in database.

d) **Geographic Unit(s) of Measurement**

Survey plot size varies.

e) **Period of Record**

Historical 1934 - present (sporadic intervals).

f) **Update Frequency**

Annual, following entry of historical information.

DATABASE: AVIAN CENSUS PLOTS

g) **Database Hardware/Software Configuration**

DOS-based microcomputer with DBASE III+ Quattro software or ASCI files can be produced.

h) **Output Format(s) (tables, maps, etc.)**

Selected parts of the file or summary tables and figures in computer format, or possibly hardcopy.

5. **Restrictions and Conditions**

Users must have a knowledge of limitations and usefulness of avian survey data obtained from the territory mapping technique; data on rare, threatened or endangered species are restricted.

6. **Price Information**

No charge. Requestor must submit floppy disks with request.

7. **Corresponding Printed Sources**

None

8. **Languages**

English

9. **User Aids Available**

None

10. **Suggested Keywords**

Wildlife - non-game birds
Birds - population trends

11. **Additional Information**

1. This database is proposed for development in 1989.

May 1989

DATABASE: AVIAN USE OF AGROHABITATS

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Bird species composition of habitats in agricultural landscapes in the Great Lakes - St. Lawrence region of Canada.

b) **Purpose of the Database**

To assess risk to bird species of new and currently used registered pesticide products in Canada.

3. a) **Name and Address of Responsible Organisation**

Migratory Bird Surveys Division, Wildlife Toxicology and Surveys Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Kathy Freemark (819) 997-6082

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

For each of 80 habitats:
- bird species list
- species presence by
  . month
  . activity (feeding, nesting, roosting, perching)
  . intensity (bird/nest density, proportion of time spent in habitat)
- habitat description
  . general crop type (oil seeds, legumes, hay, etc.)
  . specific crop type (alfalfa, soybeans, corn, bailey, oats, etc.)
  . land area of each crop
- citation (information source)

b) **Geographic Coverage**

Great Lakes - St. Lawrence region of Canada (most of southern Ontario and a portion of southern Quebec)

c) **Data Acquisition Method(s)**

Data on bird species mainly from the literature, some data from field surveys; habitat data from 1986 Census of Agriculture.

d) **Geographic Unit(s) of Measurement**

Habitats of variable sizes.

e) **Period of Record**

Database was completed in 1988.

f) **Update Frequency**

No updates are planned.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

There is no charge for reports; policies for database provision have yet to be determined.

7. **Corresponding Printed Sources**

A report summarizing the information in the database is in preparation.

8. **Languages**

The report will be bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Birds - agricultural habitat use.

11. **Additional Information**

1. Bird species data come largely from U.S. studies, but are applicable in Canada.

2. This database has been used to assess risk to bird species from pesticide use based on information on bird species occurring in agricultural habitats, the agricultural habitats for which pesticides

are registered and used, and the pesticide application regime (procedure and timing). It could also be useful in predicting the impact of other modifications to agricultural habitats.

3. Consideration may be given to expanding this database for the purposes of examining the effects of changes in habitat structure on species use.

4. The report summarizing the distribution of agricultural habitats within the region and the distribution of bird species within habitats is entitled, "Bird use of agricultural habitats in the Great Lakes St. Lawrence region". It will be a technical report available from the responsible organization.

MAY 1989

DATABASE: BIRD BANDING AND RECOVERY DATABASE

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

Data from across Canada and U.S. on bird banding and recovery.

b) **Purpose of the Database**

To document location and movement of birds.

3. a) **Name and Address of Responsible Organisation**

Bird Banding Office, National Wildlife Research Centre, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Richard Elliott (819) 953-1425
Ms. Lucie Métras (819) 953-1426

c) **Access Mechanisms**

Through the responsible organization. Data available on floppy disk.

4. a) **Parameters Measured (summarized if too extensive)**

- bird species (all species captured are banded)
- bird attributes
  . sex
  . age
  . condition (dead, alive, health)
- banding methods
- methods of bird characteristic determination
- banding and recovery locations

b) **Geographic Coverage**

International (U.S.A., Mexico, Carribean) and national, including all provinces and territories.

c) **Data Acquisition Method(s)**

Reports on banding from banders; recovery data from general public

d) **Geographic Unit(s) of Measurement**

Records summarized by degree or 10 minute blocks.

e) **Period of Record**

Recovery data: approximately 1950's - present
Banding data: 1908 - present

DATABASE: BIRD BANDING AND RECOVERY DATABASE

f) **Update Frequency**

Annually in November.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software; data stored on mangnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Tables and maps available on request.

5. **Restrictions and Conditions**

Data on threatened or endangered species are restricted; banders have first rights to data publication.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Reports are prepared irregularly based on portions of the data, but no regular publications series summarizing the database information is produced.

8. **Languages**

English mainly used in the database. French translation relating to the database is available. Reports are bilingual.

9. **User Aids Available**

North American Bird Banding Techniques, Volume 1.

10. **Suggested Keywords**

Wildlife - birds
Birds - migration
Birds - banding, recovery

11. **Additional Information**

1. The database will be transferred to a microcomputer by 1991.

2. Publications in 7 and 9 are available from the responsible organization.

3. Data are shared with the provinces and territories and the U.S. Fish and Wildlife Service, who may also produce publications.

DATABASE: BIRD NAMES

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

Standardized sets of bird names in various languages, taxonomy, geographic distribution, food habits, and legal status for birds in North America.

b) **Purpose of the Database**

To standardize common names and provide basic ecological information on North America bird species.

3. a) **Name and Address of Responsible Organisation**

Migratory Bird Conservation Division, Migratory Birds and Wildlife Conservation Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Kathy Dickson (819) 953-1415

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- common names in various languages used North and South America
- American Ornithological Union number, and checklist order
- scientific name, family and order
- regional (by province) population status (increasing, decreasing, stable)
- breeding distribution (Canada, U.S., Central America, South America, offshore)
- winter distribution
- feeding habitats (herbivore, piscivore, granivore, etc.).

b) **Geographic Coverage**

All North American bird species.

c) **Data Acquisition Method(s)**

Literature, aknovledged experts.

d) **Geographic Unit(s) of Measurement**

Not applicable

DATABASE: BIRD NAMES

e) **Period of Record**

Database not yet operational.

f) **Update Frequency**

At irregular intervals as updated information becomes available.

g) **Database Hardware/Software Configuration**

DOS-based microcomputer with DBASE III + and Quattro software. ASCI files can be produced.

h) **Output Format(s) (tables, maps, etc.)**

Selected parts, entire file, or summarized fields can be produced on disk or hardcopy.

5. **Restrictions and Conditions**

None

6. **Price Information**

No charge. Requestor must submit floppy disks with request.

7. **Corresponding Printed Sources**

None

8. **Languages**

Primarily in English; some common names in French; some common names in Spanish.

9. **User Aids Available**

Description of source for each variable included in database.

10. **Suggested Keywords**

Bird names
Birds - North America
Wildlife - birds

11. **Additional Information**

1. This database is under development and will be operational in 1989.

May 1989

DATABASE: CO-OPERATIVE BREEDING BIRD SURVEY

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from nationally distributed locations on species and number of breeding birds.

b) **Purpose of the Database**

To assess trends in songbird populations.

3. a) **Name and Address of Responsible Organisation**

Wildlife Toxicology and Surveys Branch, National Wildlife Research Centre, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Richard Elliott (819) 953-1425
Ms. Lucie Métras (819) 953-1426
Mr. Brian Collins (819) 997-1361

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- species (mostly songbirds/passerines but other common groups include terns, sea gulls, shorebirds).
- number of breeding birds determined by counts of singing males or by sight.

b) **Geographic Coverage**

International (US), and national, mainly in the provinces with some territorial coverage.

c) **Data Acquisition Method(s)**

Data collected by volunteers along car-driven transects.

d) **Geographic Unit(s) of Measurement**

Individual transects, latitude and longitude to the minute for transect starting point.

e) **Period of Record**

From 1966 - present; national coverage as of 1969.

DATABASE: CO-OPERATIVE BREEDING BIRD SURVEY

f) **Update Frequency**

Annually, in February.

g) **Database Hardware/Software Configuration**

Mainframe computer, custom and DBASE III software; data stored on magnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Tables

5. **Restrictions and Conditions**

Data on threatened or endangered species are restricted.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Annual reports are available up to 1980; an annual report for 1989 is in preparation.

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

The first 10 years of the cooperative breeding bird survey in Canada. CWS Report Series No. 42, 1978.

10. **Suggested Keywords**

Wildlife - birds
Birds - breeding
Songbirds

11. **Additional Information**

1. An annual report is planned starting in 1989.

2. Periodic reports (proposed every five (5) years) analysing longterm trends are planned.

3. A summary report covering 1966 - 1983 is in preparation.

4. Reports using Canadian and American data are published annually by the U.S. Fish and Wildlife Service.

5. The reports in 7 and 9 are available from the responsible organization.

May 1989

DATABASE: MIGRATORY GAME BIRD POPULATION STATUS

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

Aerial surveys and ground counts of breeding waterfowl populations and habitat conditions, and wintering area inventories of waterfowl across North America.

b) **Purpose of the Database**

To establish trends in population size and monitor long-term patterns in waterfowl abundance.

3. a) **Name and Address of Responsible Organisation**

Migratory Bird Conservation Division, Migratory Birds and Wildlife Conservation Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Kathy Dickson (819) 953-1426

c) **Access Mechanisms**

Through the responsible organization

4. a) **Parameters Measured (summarized if too extensive)**

- population indices for each species of waterfowl in various seasons
- pond counts in western Canada and northwestern United States
- waterfowl species (ducks, geese, swans)

b) **Geographic Coverage**

North American, all provinces, territories and states.

c) **Data Acquisition Method(s)**

Cooperative aerial and ground surveys conducted by the CWS, US Fish and Wildlife Service, and provincial/state/territorial wildlife biologists.

d) **Geographic Unit(s) of Measurement**

Varies among surveys.

e) **Period of Record**

1955 (approximately) - present

DATABASE: MIGRATORY GAME BIRD POPULATION STATUS

f) **Update Frequency**

Annually, following entry of all historical data sets.

g) **Database Hardware/Software Configuration**

DOS-based microcomputer with DBASE III +, or Quattro software, ASCI files can also be produced.

h) **Output Format(s) (tables, maps, etc.)**

Computer files on floppy disks.

Selected parts of files, summary tables and figures can be prepared in hardcopy if necessary.

5. **Restrictions and Conditions**

Users must have a knowledge of usefulness and limitations of avian census techniques; data on rare, threatened or endangered species are restricted.

6. **Price Information**

No charge. Requestor must submit floppy disks with request.

7. **Corresponding Printed Sources**

1. An annual report - Status of Waterfowl - is produced by the U.S. Fish and Wildlife Service.

2. A semi-annual report-Status of waterfowl in Canada-is produced by CWS.

8. **Languages**

Both reports are available in French and English; database tables contain only numbers.

9. **User Aids Available**

Manual of standard operating procedures for the waterfowl breeding population surveys.

10. **Suggested Keywords**

Migratory birds - population trends
Waterfowl - population trends

11. **Additional Information**

1. This database is under development and will be operational in 1989.

2. The publications in 7 and 9 are available from the responsible organization.

May 1989

DATABASE: SPRING BREEDING GROUNDS SURVEY - EASTERN CANADA

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

Population data for waterfowl from eastern Canada.

b) **Purpose of the Database**

To monitor waterfowl populations and evaluate trends.

3. a) **Name and Address of Responsible Organisation**

Wildlife Toxicology and Surveys Branch, National Wildlife Research Centre, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Brian Collins (819) 997-1361
Mr. Richard Elliott (819) 953-1425

c) **Access Mechanisms**

Through the responsible agency.

4. a) **Parameters Measured (summarize if too extensive)**

- bird species (all waterfowl species)
- bird sex
- number of birds

b) **Geographic Coverage**

Ontario, Quebec and maritime provinces.

c) **Data Acquisition Method(s)**

Aerial and possibly ground surveys of fixed blocks randomly distributed across the region.

d) **Geographic Unit(s) of Measurement**

10 x 10 km or 5 x 5 km blocks.

e) **Period of Record**

To be established.

DATABASE: SPRING BREEDING GROUNDS SURVEY - EASTERN CANADA

f) **Update Frequency**

To be established.

g) **Database Hardware/Software Configuration**

To be established.

h) **Output Format(s) (tables, maps, etc.)**

To be established.

5. **Restrictions and Conditions**

To be established.

6. **Price Information**

To be established.

7. **Corresponding Printed Sources**

To be established.

8. **Languages**

To be established

9. **User Aids Available**

To be established.

10. **Suggested Keywords**

Wildlife - waterfowl
Waterfowl - population trends

11. **Additional Information**

This database is under development and not yet in operation. Pilot surveys will be conducted in 1989 and it is expected to be operational in 1990-1991.

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS)

1. **Datafile Name(s)**

This database contains numerous datafiles; 9 major subfiles are described as separate databases (see 11).

2. a) **Summary Description of Contents**

Numerous databases at a variety of scales describing Canadian lands and waters.

b) **Purpose of the Database**

To provide data for environmental planning and modelling.

3. a) **Name and Address of Responsible Organisation**

Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Ian Marshall (819) 953-1454

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Numerous topics including:
- land capability for wildlife, recreation, forestry, and agriculture
- land capability analysis
- administrative boundaries (census divisions, watersheds)
- shoreline
- ecoregions
- land use
- federal lands
- national park biophysical data
- waste disposal sites
- spruce budworm
- animal species distributions
- geology
- forestry
- regional parks

b) **Geographic Coverage**

National to regional across Canada; maps at a variety of scales.

c) **Data Acquisition Method(s)**

Data from compiled maps dealing with the environment or geocoded files.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS)

d) **Geographic Unit(s) of Measurement**

Variable.

e) **Period of Record**

Data collected from mid 1960's to present; databases developed 1970 - present.

f) **Update Frequency**

Varies among databases; catalogues updated annually.

g) **Database Hardware/Software Configuration**

IBM mainframe, optronics scanner/plotter; mini-and microcomputer with custom software (CGIS) and SPANS, GIMMS, etc.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables, text, digital files (see 11). Interactive/dial-up use.

5. **Restrictions and Conditions**

The majority of the information is unrestricted; certain databases may be used only with permission of the originator.

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. EIS summary catalogue of data holdings.
2. EIS summary catalogue of SPANS databases.
3. CLDS/CGIS catalogue of reports, 1988.
4. Maps from each of the databases.

8. **Languages**

All databases and publications are available in English and selected publications and databases also available in French. (see catalogue of reports).

9. **User Aids Available**

EIS Digital data file formats.

10. **Suggested Keywords**

Environmental databases.

11. Additional Information

1. Many of the larger databases within the CGIS database are described as separate databases (Agricultural Land Capability, Ecological Land Classification, Forestry Land Classification, Fruitlands, National Parks, Recreational Land Capability, Ungulate Land Capability, Urban Centred Regions, Waterfowl Land Capability).

2. In addition to the nine subfiles listed above, there are numerous others that contain useful environmental information. The catalogues in 7 are available from the responsible organization and should be consulted for a complete list of the databases covered in the CGIS database.

MAY 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - ECOLOGICAL LAND CLASSIFICATION

1. **Datafile Name(s)**

Ecological Land Classification

2. a) **Summary Description of Contents**

A national framework of terrestrial ecological units arranged in a nested hierarchy of different levels of mapping detail; the units within each particular level are distinguished from one another by unique sets of physiography (geology, landforms), soil vegetation, soil, climate, hydrology and wildlife attributes.

b) **Purpose of the Database**

To integrate data related to landforms, geology, soils, vegetation, climate, hydrology and wildlife into a common ecological and spatial framework for resource management and planning, and other environmental decision-making processes.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Ed Wiken (address in 3a) (819) 997-1090
Mr. Gary Ironside (address in 3a) (819) 953-1446

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- parameters such as physiography, vegetation, soils, climate, hydrology and wildlife are used to establish the ecological units; however, details for all of these parameters are not yet entered into the computer as descriptive codes. The level of detail used to delineate/describe the ecological units increases with each of the following levels of mapping:

  - ecozone (15 units, qualitative description of parameters above)
  - ecoprovince (yet to be described)
  - ecoregion (325 units, qualitative description of parameters above)
  - ecodistrict (5,400 units, quantitative description of parameters below)
  - land activity (agriculture, forestry, extraction, built-up, none, etc.)
  - land cover (forested, wetlands, farmland, water, snow/ice, etc.)
  - elevation (mean high/low)
  - primary/secondary soil thickness

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - ECOLOGICAL LAND CLASSIFICATION

- primary/secondary soil
- primary/secondary soil group

b) **Geographic Coverage**

National, all provinces and territories

c) **Data Acquisition Method(s)**

Data from field surveys, air photo and remote sensing interpretation, and existing material (both published and unpublished).

d) **Geographic Unit(s) of Measurement**

Ecological units of varying sizes.

e) **Period of Record**

Data collection began in the 1970s and continues to the present.

f) **Update Frequency**

Portions of the database are updated as nev data becomes available.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

Information is provided on a cost recovery basis.

7. **Corresponding Printed Sources**

1. Ecozones - report and map
2. Ecoprovinces - none
3. Ecoregions - map
4. Ecodistricts - some maps and reports (see 11)

8. **Languages**

The map and report for "Ecozones" is availalble in both English and French; ecodistrict maps and reports for Québec are available in French, for the rest of Canada English.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - ECOLOGICAL LAND CLASSIFICATION

9. **User Aids Available**

1. CLDS summary catalogue of data holdings
2. CGIS/CLDS catalogue of data holdings

10. **Suggested Keywords**

Land classification - ecological

11. **Additional Information**

1. This database is part of the Canada Geographic Information System database.

2. Ecozones have been mapped at about 1:30,000,000, and described qualitatively (Ecological Land Classification Series, No. 19). The boundaries of ecoprovinces have been delineated. Ecoregions, currently mapped at 1:7,500,000, are described qualitatively and will be described quantitatively and consistently in 1989. Some ecodistrict maps are published, but they are described quantitatively for some parameters (4a).

3. Data (4a) for all ecodistricts is computerized. Similar information could be generated for ecoregions and ecoprovinces by pooling information from the component ecodistricts, but this has not yet been done.

4. Additional data will be added to the computerized database for ecodistricts.

5. Further subdivision below the ecodistrict level (ecosection, ecosite, ecoelement) is a part of the classification hierarchy, but those levels have not yet been (or are likely to ever be) identified, mapped or described by the Ecological Research Applications Division.

6. For some areas (Beaufort Sea, Mackenzie Mountains, Viscount Melville Sound, Lancaster Sound) databases containing additional digitized data on ecodistricts (macrotopography, landforms, soils, vegetation, water characteristics, wildlife) exist and the information is mapped at 1:500,000.

7. The publications in 9 are available through the State of the Environment Reporting Branch, CWS.

8. The northern Yukon ecological land survey (Ecological Land Classification Series, No. 6.) is an example to illustrate the ecoregion - ecodistrict framework, along with quantitative and qualitative descriptions.

9. Various provincial reports exist which describe similar ecological land classifications, especially at the more detailed levels (i.e. ecodistrict, ecosection, etc.).

July 1989

CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - NATIONAL PARKS

1. **Datafile Name(s)**

National Parks Biophysical Database: one or more files for each of 10 national parks (see 4, 9).

2. a) **Summary Description of Contents**

Biophysical information for several national parks across Canada.

b) **Purpose of the Database**

To provide baseline biophysical data for environmental planning in national parks in Canada.

3. a) **Name and Address of Responsible Organisation**

Environmental Information Systems Division, State of the Environment Reporting Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Nicole Chartrand (819) 953-1460

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Not all parameters are included for each national park.

- major land regions
- land systems
- land types
- national park (Gros Morne, Terra Nova, Northern Yukon, Cape Breton Highlands, Wood Buffalo, Nahanni, Pukaskwa, Fundy, Forillon, Kouchibouguac)
- biophysical parameters (vegetation, soil, hydrology, drainage, topography, geology)

b) **Geographic Coverage**

Ten national parks across Canada.

c) **Data Acquisition Method(s)**

Data from biophysical inventory reports prepared for the Canadian Parks Service.

d) **Geographic Unit(s) of Measurement**

National Parks.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - NATIONAL PARKS

e) **Period of Record**

Not applicable.

f) **Update Frequency**

Maps prepared on an irregular basis as additional biophysical data are collected.

g) **Database Hardware/Software Configuration**

Mainframe and micro-computers with custom software and numerous other standard software packages; ASCII files available.

h) **Output Format(s) (tables, maps, etc.)**

Maps, mostly at 1:50,000, varying from 1:12,500 to 1:50,000, tables.

5. **Restrictions and Conditions**

None

6. **Price Information**

Information available on a cost recovery basis; cost estimates available on request

7. **Corresponding Printed Sources**

1. Maps (see 11).
2. Biophysical reports (see 11).

8. **Languages**

Published maps are bilingual; biophysical reports are in the language of the author.

9. **User Aids Available**

1. CGIS/EISD catalogue of data holdings.
2. EISD summary catalogue of data holdings (see 11).

10. **Suggested Keywords**

Environmental assets - biophysical surveys
Biophysical surveys - national parks
National parks - natural resources

11. **Additional Information**

1. This database is part of the Canada Geographic Information System database.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - NATIONAL PARKS

2. This database for protected sites could be used as baseline data for assessing environmental change.

3. Maps and catalogues are available from the responsible organization.

4. Copies of biophysical reports are kept at the Canadian Parks Service, Ottawa, Ontario, in regional offices, and at the relevant park offices.

5. Databases for other national parks are on the CAN SIS system at Agriculture Canada.

May 1989

DATABASE: ECOCLIMATIC PROVINCES AND REGIONS OF CANADA DATABASE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national framework of broad land areas portraying regional climate as expressed by vegetation and soil developement on normal (mesic) sites.

b) **Purpose of the Database**

To identify homogeneous ecoregions based on climate and vegetation for use in environmental planning.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Gary Ironside (819) 953-1446
Mr. Ed Wiken (819) 997-1090

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarize if too extensive)**

- ecoclimatic province (10, e.g. arctic, subarctic, boreal, cordilleran)
- ecoclimatic region (72)
  - . temperature (mean annual, lowest monthly, period over 0°)
  - . precipitation (mean monthly, mean annual)
  - . vegetation (cover, characteristic species, vertical stratification)
  - . wildlife (characteristic species)
  - . land use activities (mineral extraction, hunting, fishing, forestry, tourism).

b) **Geographic Coverage**

National, all provinces and territories.

c) **Data Acquisition Method(s)**

Mainly from landsat and airphoto interpretation, field surveys and existing information (reports and maps).

d) **Geographic Unit(s) of Measurement**

Ecoclimatic provinces oclimatic regions.

DATABASE: ECOCLIMATIC PROVINCES AND REGIONS DATABASE

e) **Period of Record**

Data compiled 1978 - 1988; database established in 1989.

f) **Update Frequency**

None planned in the immediate future.

g) **Database Hardware/Software Configuration**

Information in paper files.

h) **Output Format(s) (tables, maps, etc.)**

Map, text.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

A report describing the ecoclimatic regions is being prepared; it will contain a map at 1:7,500,000 showing ecoclimatic provinces, and regions, and photographs.

8. **Languages**

The report will be in both French and English.

9. **User Aids Available**

See 7.

10. **Suggested Keywords**

Land classification - climate, vegetation
Land classification - ecoclimatic regions

11. **Additional Information**

1. The data for the report in 7 are not computerized and there are no plans to do this.

2. The report describing the database will be available from the responsible organization in 1989.

DATABASE: ECOCLIMATIC PROVINCES AND REGIONS DATABASE

3. Each ecoclimatic region is characterized and defined on the basis of normal sites (soils are deep, loamy, have adequate nutrients and are well drained with moderate exposures). Differences in vegetation among normal sites therefore reflect climatic variation, allowing ecoclimatic regions to be distinguised.

4. An example illustrating the application of this database (the effect of doubling carbon dioxide) can be found in: Canada Committee on Ecological Land Classification Newsletter No. 17, 1988.

May 1989

DATABASE: FEDERAL LAND DATABASE (FLDB)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database identifying federally owned and administered lands in Canada.

b) **Purpose of the Database**

To provide environmental and land use advice regarding the management and use of federal lands, and to support the Canadian Environmental Protection Act (CEPA) Part IV, and compliance with related legislation, policies and strategies of Environment Canada.

3. a) **Name and Address of Responsible Organisation**

Habitat and Land Use Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada.

b) **Contact Pe son(s), Address (if different from 3a), Telephone Number**

Ian Marshall (819) 953-1453
Robert Audet (819) 997-2471

c) **Access Mechanisms**

Through the responsible organization only.

4. a) **Parameters Measured (summarized if too extensive)**

. province
. census division/census sub-division
. description of property
. site area (hectares)
. dominant land use code (32 identified)
. earliest property acquisition date
. latest property acquisition date
. tenure status (e.g. owned, leased)
. constituency (federal)
. metrocade (identifies major urban areas or census metropolitan areas)
. location (latitude and longitude, as centroid)
. number of buildings
. unique property identifier number.

b) **Geographic Coverage**

All federally owned or administered lands, excluding unalienated territorial crownlands (Yukon, NWT,) category CII Crown Corporations. (e.g. CNR, Petro Canada, Air Canada) and leased accommodation space in private sector buildings.

DATABASE: FEDERAL LAND DATABASE (FLDB)

c) **Data Acquisition Method(s)**

Annual input from Public Works Canada Central Real Property Inventory (CRPI) and location information from individual land records of departments and agencies of the federal government.

d) **Geographic Unit(s) of Measurement**

Information is compiled on 1: 250,000 NTS maps. Size, shape, and location of federal holdings greater than 64.7 Hectares are recorded and retrievable as polygon data. Land parcels less than 64.7 Hectares are classified as point data (centroid) and their size and location (latitude and longitude) are retrievable.

e) **Period of Record**

Compilation began in 1977. Data verification and mapping completed to April 1986. Update to April 1988 completed for microcomputer.

f) **Update Frequency**

Under review; depends on final decisions of Treasury Board and the Department of Public Works on replacement database for the CRPI.

g) **Database Hardware/Software Configuration**

Operational on DBASE III/SPANS Microcomputer workstations and on the Canada Geographic Information System (CGIS) mainframe for plotting polygon data.

h) **Output Format(s) (tables, maps, etc.)**

Tables, graphs, maps, inventory listing (selected variables).

5. **Restrictions and Conditions**

Some data are restricted. Access to be cleared by responsible managers.

6. **Price Information**

Currently no change. Likely to be cost recovery for mainframe computer plots of polygons on NTS sheets and/or specialized analysis requests requiring specialized programming on SPANS.

7. **Corresponding Printed Sources**

Standardized provincial summary reports available on request. Other specialized summaries planned, e.g. Land Use, etc.

8. **Languages**

Description and definition of variables available in both languages. Data input for Quebec in French, rest of Canada in English.

DATABASE: FEDERAL LAND DATABASE (FLDB)

9. **User Aids Available**

Description of all variables, codes subject headings.

10. **Suggested Keywords**

Tenure
Land Use
Authority

11. **Additional Information**

1. Database is currently the subject of a pilot study to determine its possible use as basis for an Environmental Management System Inventory in support of CEPA Part IV, and to determine means to update on regular basis.

2. Database can be used to conduct specialized analyses by selecting various individual variables or groups of variables and/or relating them to additional data sets (new or existing) through DBASE III and/or SPANS.

May 1989

DATABASE: LANDBASE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database providing economic, land stress, agricultural, foresty, wildlife and recreation data for rural land in standardized census districts across southern Canada.

b) **Purpose of the Database**

To identify trends in the use of rural land in southern Canada for policy development and planning purposes.

3. a) **Name and Address of Responsible Organisation**

Conservation Strategies and Development Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottava, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Dr. Ted Manning (819) 953-1438
Ms. Ilze Reiss (819) 997-2102

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- economic/demographic (labour force, population size)
- land stress (soil degradation, acid rain)
- agriculture (land use, crops, fruit, vegetables, labour, land tenure, livestock, fertilizer, irrigation, land capability)
- forestry (land capability for forestry, areas of productive forest land)
- recreation wildlife (conservation areas, parks, land capability for waterfovl)
- standardized census district (229 units)

b) **Geographic Coverage**

Southern Canada within the Canada Land Inventory boundary (approximately south of 60° N).

c) **Data Acquisition Method(s)**

Data are obtained from existing databases such as the Canada Land Inventory, Canada Census of Agriculture, and Census of Population.

d) **Geographic Unit(s) of Measurement**

Standardized census districs.

DATABASE: LANDBASE

e) **Period of Record**

Census data available from 1971, 1976, 1981, 1986.

f) **Update Frequency**

Every five years when census is conducted.

g) **Database Hardware/Software Configuration**

Microcomputer with SPSS software.

h) **Output Format(s) (tables, maps, etc.)**

Tables, maps.

5. **Restrictions and Conditions**

None

6. **Price Information**

No charge for reasonable sized requests.

7. **Corresponding Printed Sources**

No periodic reports are planned; one report has been prepared (see 11).

8. **Languages**

The report is available in French and English; the database and background documents are in English.

9. **User Aids Available**

A documentation binder has been prepared for internal use that can be viewed at the responsible organization's office, but it is not for public dissemination.

10. **Suggested Keywords**

Rural land use - trends

11. **Additional Information**

1. Report prepared: Agricultural Land Use Change in Canada: Process and consequences. Land use in Canada Series No. 21, 1982.

2. The above report is available from the responsible organization.

3. This database can be used to identify both anomalies and broad national relationships for further examination to determine cause and effect relationships.

May 1989

DATABASE: NORTHERN LAND USE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A series of maps providing information on natural resources and related human activities for Canada north of 60° latitude.

b) **Purpose of the Database**

To be used as a planning and management tool for Canada north of 60° latitude.

3. a) **Name and Address of Responsible Organisation**

Ecological Applications Research Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Reid (819) 953-1443

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Numerous topics including:

- wildlife
  - . major groups (seabirds, polar bears, waterfowl, caribou, arctic fox, marine mammals)
  - . hazards (disturbance)
  - . habitat (boundaries, activity, seasonal use)
- fish
  - . species (arctic charr, laketrout, stickleback)
  - . habitat (spawning, migration areas)
  - . fishery (domestic, commercial)
- hunting and trapping (species harvested, area covered)
- ecodistricts (topography, soils, geology, water, vegetation, wildlife)
- coastal type (beaches, cliffs, plains, glaciers, hills, riverine)
- areas of interest (wildlife sanctuaries, IBP sites, Natural Areas/Sites of Canadian significance, sports fishing camps).

b) **Geographic Coverage**

Canada north of 60° latitude, excluding Ellesmere Island, and Quebec.

DATABASE: NORTHERN LAND USE

c) **Data Acquisition Method(s)**

From existing maps and studies, additional field surveys and personal communications.

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

Data were collected between 1971-1986.

f) **Update Frequency**

Unlikely to be updated.

g) **Database Hardware/Software Configuration**

The maps are supported by paper files.

h) **Output Format(s) (tables, maps, etc.)**

Approximately 400 maps.

5. **Restrictions and Conditions**

None

6. **Price Information**

Map cost is approximately $4.

7. **Corresponding Printed Sources**

Some of the information used to generate the maps is also published in reports (see 11).

8. **Languages**

English

9. **User Aids Available**

1. Slide tape show - how to use the maps
2. Slide tape show - general description of the database
3. Pamphlet describing the database.

10. **Suggested Keywords**

Land use - northern Canada
Land use - wildlife

DATABASE: NORTHERN LAND USE

11. **Additional Information**

1. The database consists of maps with legends providing great detail on the features mapped. The back of each map provides a bibliography for the area covered.

2. Maps, (Northern Land Use Information Series) reports and the user aids are available from the responsible organization or the Canada Land Inventory Map Office, 588 Booth Street, Ottawa, Ontario

3. The map series is incomplete - coverage for Quebec and Ellesmere Island is not available.

4. From this database, the Northern Perspective map series is derived which provides information at a scale of 1:5,000,000 on selected topics covered by the database (e.g. caribou, development and resource potential).

5. Fisheries reports for all sections, a wildlife report for one section and a land use report for one section have been prepared.

May 1989

II. AGENTS OF ENVIRONMENTAL CHANGE

DATABASE: MINE COMPLIANCE DATA

1. **Datafile Name(s)**

   Minestat

2. a) **Summary Description of Contents**

   A national database on liquid effluent for basemetal, iron ore, gold and silver mines.

   b) **Purpose of Database**

   To determine compliance with mining effluent regulations.

3. a) **Name and Address of Responsible Organisation**

   Mining, Mineral and Metallurgical Processes Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

   b) **Contact Person(s), Address (if different from 3a), Telephone Number**

   Mr. Bill Wong (819) 997-2294
   Mr. Jim Scott (819) 953-1104

   c) **Access Mechanisms**

   Through the responsible agency.

4. a) **Parameters Measured (summarized if too extensive)**

   - mine (name, company, location, mining method, capacity, ore tonnage and grade)
   - minerals in ore (mainly gold, silver, zinc, lead, copper, nickel, iron)
   - cyanide removal method (natural degradation, no cyanide, sulphur dioxide/air, hydrogen perioxide)
   - type of waste treatment (tailings pond, settling pond, drainage)
   - effluent characteristics
     . contaminant concentrations (lead, cyanide, zinc, copper, nickel, arsenic)
     . pH
     . total suspended matter

   b) **Geographic Coverage**

   National, including all provinces and territories.

   c) **Data Acquisition Method(s)**

   Mines under compliance report monthly to the provinces or territories.

DATABASE: MINE COMPLIANCE DATA

d) **Geographic Unit(s) of Measurement**

Individual mines.

e) **Period of Record**

1988 - present.

f) **Update Frequency**

Irregularly, at least monthly.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III + software for basemetal mines and SYMPHONY software for gold mines.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Some data may be restricted; contact responsible organization.

6. **Price Information**

No charge for reasonably sized requests.

7. **Corresponding Printed Sources**

Periodic reports produced; see 11 for most recent report.

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Mining - liquid waste
Waste - metal mining

11. **Additional Information**

1. Regulation limits for effluent provided in document below (2).

2. Status report on water pollution control in the Canadian metal mining industry (1986).

3. Gold and silver mines are not regulated.

4. Publications available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario. K1A 0H3.

May 1989

DATABASE: NON-FERROUS SMELTERS DATABASE

1. **Datafile Name(s)**

One for each of 10 smelters.

2. a) **Summary Description of Contents**

A database covering all Canadian non-ferrous smelters including processing equipment, air emissions, pollution control methods and production.

b) **Purpose of the Database**

To monitor the Canadian non-ferrous smelting industry with respect to sulphur dioxide and trace element emissions.

3. a) **Name and Address of Responsible Organisation**

Mining, Mineral and Metallurgical Process Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Peter Paine (819) 997-2295

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- processes used (roasting, smelting, converting)
- emission parameters
  . sulphur dioxide (SO_2)
  . particulates
  . heavy metals, (nickel, copper, lead, zinc, cadmium)
- smelter location (city)
- metal production on annual basis
- by-products (sulphuric acid, liquid sulphur dioxide)
- air pollution control equipment (scrubbers, electrostatic precipitators)

b) **Geographic Coverage**

All 10 Canadian non-ferrous smelters.

c) **Data Acquisition Method(s)**

Data provided by companies through regulation compliance to regional offices.

d) **Geographic Unit(s) of Measurement**

Individual smelters.

DATABASE: NON-FERROUS SMELTERS DATABASE

e) **Period of Record**

1970 - present

f) **Update Frequency**

Irregular, usually monthly.

g) **Database Hardware/Software Configuration**

Paper file.

h) **Output Format(s) (tables, maps, etc.)**

Tables and text.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

An annual report summarizing 1988 production and 1989 process technology is in preparation. This is the first in the series of annual reports.

8. **Languages**

Report will be in English.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Non-ferrous smelters - waste emissions air

11. **Additional Information**

1. The database will be put on a microcomputer in the future.

May 1989

DATABASE: NUCLEAR DATA SYSTEM (NUDAT)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A registry of contaminants in effluents associated with uranium mining/milling operations in Ontario.

b) **Purpose of the Database**

To assess compliance with discharge limits, identify trends in the accumulation of environmental pollutants and to evaluate their annual loadings.

3. a) **Name and Address of Responsible Organisation**

Oil, Gas, and Energy Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Dr. Pat Vasudev (address in 3a) (819) 953-1127
Mr. John Brydges, Inventory Management Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3. (819) 994-3129.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- Radionuclides (uranium, radium - 226)
- Non-radionuclides (ammonia, nitrates, sulphates)
- pH
- Alkalinity
- Total disolved solids
- etc.

b) **Geographic Coverage**

Ontario

c) **Data Acquisition Method(s)**

Monitoring data supplied by mining companies.

d) **Geographic Unit(s) of Measurement**

Site specific measurements.

DATABASE: NUCLEAR DATA SYSTEM (NUDAT)

e) **Period of Record**

Data from 1980 - 1986 have been entered in the database; data after this period to the present are available but have not yet been entered.

f) **Update Frequency**

Annually

g) **Database Hardware/Software Configuration**

Mainframe computer with System 2000 database management.

h) **Output Format(s) (tables, maps, etc.)**

Tables

5. **Restrictions and Conditions**

None

6. **Price Information**

Undetermined

7. **Corresponding Printed Sources**

A summary report is being planned.

8. **Languages**

Tables contain numbers only.

9. **User Aids Available**

None

10. **Suggested Keywords**

Uranium mines - effluent
Contaminants - radioactive
non-radioactive

11. **Additional Information**

1. It is planned to expand the database to include all nuclear facilities across Canada, but this may be difficult as much of the required data may not be readily obtainable.

May 19

DATABASE: FERROUS FOUNDRY DATABASE

1. **Datafile Name(s)**

Atlantic, Prairies, Quebec, Ontario, British Columbia.

2. a) **Summary Description of Contents**

A national database on production facilities and pollution controls for ferrous foundries.

b) **Purpose of the Database**

To identify and characterize ferrous foundries in Canada.

3. a) **Name and Address of Responsible Organisation**

Mining, Mineral and Metallurgical Processes Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Bill Blakeman (819) 953-1105

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- company (location, name)
- main industries served (automotive, agricultural, industrial and railway equipment, valves and pumps)
- plant capacity (tons/month)
- sand use (natural, synthetic)
- additives (seacoal, clay, water)
- moulding practices (pit casting, match plate, machine)
- melting facilities (cupola, electric arc furnace, channel induction furnace)
- pollution abatement measures (afterburners, air filterers, waste dumping)
- operations for which there are no pollution controls

b) **Geographic Coverage**

National, all Canadian ferrous foundries.

c) **Data Acquisition Method(s)**

Data obtained from questionnaires, reports and provincial offices.

d) **Geographic Unit(s) of Measurement**

Individual foundries.

DATABASE: FERROUS FOUNDRY DATABASE

e) **Period of Record**

1986 - present

f) **Update Frequency**

Not yet determined.

g) **Database Hardware/Software Configuration**

Microcomputer using DBASE III software.

h) **Output Format(s) (tables, maps, etc.)**

Text.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Hardcopies of data are available, but no reports have been published.

8. **Languages**

Text in english.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Ferrous foundries - identification
- locations
- pollution control
- pollution

Pollution abatement - ferrous foundries
- pollution abatement

11. **Additional Information**

1. The 1986 survey provides baseline data against which future surveys can be compared.

2. Additional information available in Basic Ferrous Foundry Operations, Williams, W.J. Environment Canada, 1986.

May 1989

DATABASE: INDUSTRIAL WATER USE DATABASE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data on water use from nationally distributed industrial companies obtained through periodic surveys of water intake, discharge, use, cost and consumption.

b) **Purpose of the Database**

To collect data on water use by industry to direct research and applied studies.

3. a) **Name and Address of Responsible Organisation**

Water Planning and Management Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Don Tate (819) 953-3478

c) **Access Mechanisms**

Through the responsible organization. A user friendly database should be established by 1991 to allow the public direct access to the data.

4. a) **Parameters Measured (summarized if too extensive)**

- water intake by
  . source (surface, ground, combined)
  . treatment
  . purpose (cooling, processing, steam generation)

- water discharge by
  . point (municipal sever, lake, river, ocean)
  . treatment (filtration, coagulation, screening)

- water cost
- recirculation by purpose (see above)
- use rate
- consumption rate

b) **Geographic Coverage**

National, covering over 7 000 industrial companies, all provinces and territories represented.

c) **Data Acquisition Method(s)**

Questionnaires.

DATABASE: INDUSTRIAL WATER USE DATABASE

d) **Geographic Unit(s) of Measurement**

Individual industrial companies.

e) **Period of Record**

1972, 1976, 1981, 1986.

f) **Update Frequency**

Every 5 years; most recent survey 1986.

g) **Database Hardware/Software Configuration**

Microcomputer; data stored on floppy disk in LOTUS format and in paper files; mainframe computer used for tabulating results.

h) **Output Format(s) (tables, maps, etc.)**

Detailed data tables available.

5. **Restrictions and Conditions**

As specified on survey forms. Searches should be conducted for users by personnel of the Water Planning and Management Branch.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Data are summarized in report form (see 11)

8. **Languages**

Reports available in French and English.

9. **User Aids Available**

None

10. **Suggested Keywords**

Waste treatment - water
Manufacturing - water use
Water quality
Water quantity

11. **Additional Information**

1. Three reports have been produced:

DATABASE: INDUSTRIAL WATER USE DATABASE

Manufacturing water use survey, 1987 - A summary of results.
Water use in the Canadian manufacturing industry, 1976.
Water use in Canadian industry, 1981.

2. Reports are available from IWD Publications, Conservation and Protection, Environment Canada, 8th Floor, Place Vincent Massey, Ottawa, Ontario. K1A OH3.

May 1989

DATABASE: MUNICIPAL AND INDUSTRIAL STRATEGY FOR ABATEMENT (MISA) - IRON AND STEEL INDUSTRY DATABASE

1. **Datafile name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A regional database covering pollutants in liquid effluent from the iron and steel industry. (Ontario only)

b) **Purpose of the Database**

To collect information on pollutants in liquid effluent for the iron and steel industry in order to determine priority pollutants and establish limitation regulations.

3. a) **Name and Address of Responsible Organisation**

Mining, Mineral and Metallurgical Processes Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Kin Mah (819) 997-2271

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Liquid effluent parameters (not all are available for each mill) include:
- solids (dissolved, suspended)
- nitrogen compounds (nitrates, nitrites)
- cyanide
- phosphorus
- trace metals
- heavy metals
- organics
- extractables

b) **Geographic Coverage**

Six major iron and steel mills in Ontario.

c) **Data Acquisition Method(s)**

Pre-regulation field sampling surveys conducted in 1987-88 by the Ontario MISA Program, and surveys conducted in 1979-80.

DATABASE: MUNICIPAL AND INDUSTRIAL STRATEGY FOR ABATEMENT (MISA) - IRON AND STEEL INDUSTRY DATABASE

d) **Geographic Unit(s) of Measurement**

Individual steel mills.

e) **Period of Record**

Two surveys: 1979-1980, 1987-1988.

f) **Update Frequency**

Compliance regulations require parameters to be reported at a variety of frequencies.

g) **Database Hardware/Software Configuration**

Microcomputer with LOTUS 1, 2, 3.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Mill authorization required for data release.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

No reports or periodic publications.

8. **Languages**

The database contains only numbers.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Waste - iron and steel industry
Iron and steel industry - effluent

11. **Additional Information**

This database is relatively new. It will be expanded as more data become available. Its primary function now is to determine which contaminants should be measured, critical regulatory limits, and at what stage in processing levels should be measured.

May 1989

DATABASE: PULP AND PAPER MILL PROFILE SYSTEM

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database that provides information on pulp and paper mill production and effluents.

b) **Purpose of the Database**

To indicate the degree of compliance of the pulp and paper industry with established effluent regulations.

3. a) **Name and Address of Responsible Organisation**

Renewable Resources Extraction and Processing Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. E. Trevor Ruthman (819) 953-1129.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- mill location
- production
  - . materials produced (pulp, paper)
  - . rate (tonnes/day)
  - . process (thermal, mechanical pulp, kraft, sulphite)
- effluent characteristics
  - . flow rate (m^3/tonne)
  - . total suspended solids (TSS)
  - . biochemical oxygen demand (BOD)
  - . acute toxicity to fish

b) **Geographic Coverage**

National, 122 direct discharge mills.

c) **Data Acquisition Method(s)**

Company submitted data.

d) **Unit(s) of Measurement**

Individual pulp and paper mills.

e) **Period of Record**

1987 - present.

f) **Update Frequency**

Annual and as necessary.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III software.

h) **Output Format(s) (tables, maps, etc.)**

Text and tables; advanced report and query ability.

5. **Restrictions and Conditions**

Searches must be conducted by the responsible organization.

6. **Price Information**

No charges for reasonably sized requests.

7. **Corresponding Printed Sources**

Annual profile and pollution status reports are planned (see 11).

8. **Languages**

Reports available in French and English. Database available only in English.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Waste generation - pulp and paper
Water pollution - pulp and paper effluent

11. **Additional Information**

1. This database is under development.

2. Periodic publications listed in 7 will be available from the responsible organization when the system is fully developed (1990).

3. One publication has been produced for the industry: Status report on abatement of water pollution from the Canadian pulp and paper industry (1982).

4. The above report is available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario. K1A 0H3.

May 1989

DATABASE: MUNICIPAL WATER USE DATABASE

1. **Datafile Name(s)**

Not applicable

2. a) **Summary Description of Contents**

Data on water use and wastewater treatment from periodic surveys of nationally distributed municipalities over 1 000 population.

b) **Purpose of the Database**

To collect basic water use data for municipalities over 1 000 population for research and applied studies.

3. a) **Name and Address of Responsible Organisation**

Water Planning and Management Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Don Tate (819) 953-3478
Mr. Dave Lacelle (819) 953-1519

c) **Access Mechanisms**

Through the responsible agency.

4. a) **Parameters Measured (summarized if too extensive)**

- annual pumpage
- use by category (residential, commercial/institutional, industrial, other)
- population
- waste treatment (primary, secondary, tertiary)
- water source (surface, ground, combined)

b) **Geographic Coverage**

National, covering 1 300 municipalities, all provinces and territories represented.

c) **Data Acquisition Method(s)**

Questionnaires and telephone interviews.

d) **Geographic Unit(s) of Measurement**

Individual municipalities over 1 000 population.

DATABASE: MUNICIPAL WATER USE DATABASE

e) **Period of Record**

1983, 1986.

f) **Update Frequency**

Every 5 years as of 1986.

g) **Database Hardware/Software Configuration**

Microcomputer; data stored on floppy disk in LOTUS format; mainframe computer used for tabulating results.

h) **Output Format(s) (tables, maps, etc.)**

Detailed tables available.

5. **Restrictions and Conditions**

None; searches should be conducted by the responsible organisation.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Municipal water use in Canada, 1983.

8. **Languages**

Reports available in English and French.

9. **User Aids Available**

None

10. **Suggested Keywords**

Water use - municipal
Water quality
Waste treatment - water

11. **Additional Information**

Publication listed in 7 is available from IWD Publications, Conservation and Protection, Environment Canada, 8th Floor, Place Vincent Massey, Ottawa, Ontario. K1A 0H3.

May 1989

DATABASE: MUNICIPAL WATERWORKS AND WASTEWATER SYSTEMS DATA (MUNDAT)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national inventory of municipal waterworks and wastewater systems.

b) **Purpose of the Database**

To maintain data on drinking water treatment and wastewater treatment facilities.

3. a) **Name and Address of Responsible Organisation**

Urban Activities Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Robert Christensen (address in 3a) (819) 953-1113
Mr. Dave Hay (address in 3a) (819) 953-1109
Mr. François Cadoret, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3. (819) 953-1655

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- municipality (name, population)
- watershed
- population served
- flow (average m^3/day, design m^3)
- treatment plant names
- water supply and treatment
  . water source (surface, ground)
  . storage (m^3)
  . treatment type (filtration, chlorine, sedimentation, coagulation)
- wastewater treatment and disposal
  . sewer system (sanitary, combined, separate)
  . treatment level (primary, secondary, lagoons, septic tank)
  . treatment type (facultative, aerated, bar screen, primary clarification etc.)

b) **Geographic Coverage**

National, approximately 3 600 municipalities, 1 540 wastewater treatment plants, plus 2 900 water treatment plants.

DATABASE: MUNICIPAL WATERWORKS AND WASTEWATER SYSTEMS DATA (MUNDAT)

c) **Data Acquisition Method(s)**

Questionnaire.

d) **Geographic Unit(s) of Measurement**

Municipalities.

e) **Period of Record**

1974 - present.

f) **Update Frequency**

Most of data is updated every 3 or 4 years, with partial updates yearly.

g) **Database Hardware/Software Configuration**

Mainframe computer with system 2000 database management using FORTRAN.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

National inventory of municipal waterworks and wastewater systems in Canada; available approximately every 2 to 4 years; most recent report to 1986.

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Wastewater treatment
Drinking water treatment

DATABASE: MUNICIPAL WATERWORKS AND WASTEWATER SYSTEMS DATA (MUNDAT)

11. **Additional Information**

1. The database is currently at the Department of Energy, Mines and Resources, but a framework for putting it on a microcomputer, probably with DBASE software, will be developed in 1989. No date for completion of data transfer from the mainframe computer has been established.

2. The publication in 7 is available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario K1A OH3.

May 1989

DATABASE: NATIONAL ANALYSIS OF TRENDS IN EMERGENCIES SYSTEM (NATES)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Inventory of Canadian accidents involving spills of hazardous materials (including hydrocarbons).

b) **Purpose of the Database**

To analyze accident trends and distribution of hazardous material spills to assess contingency plans, equipment requirements, prevention programs and regulation effectiveness.

3. a) **Name and Address of Responsible Organisation**

Environmental Emergency Program Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Gilles Cloutier (819) 997-3744
Mr. Brian Mansfield (819) 997-3352

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Examples listed below:

- material spilled, amount
- reporting agency
- location (geographic area, latitude, longitude)
- site type (air, underground, river, bay, harbour etc.)
- cause (collision, sinking, leak etc.)
- reason (intent, error, ice etc.)
- source (tanker, train, aircraft etc.)
- sector (petroleum, pulp and paper, metallurgy etc.)
- cleanup (who, % recovery)
- acts involved (none, arctic waters, municipal bylaw etc.)
- consequences (fish kill, human casualty etc.)

b) **Geographic Coverage**

National, all provinces territories, and offshore to the 320 km limit.

c) **Data Acquisition Method(s)**

Data reported to regional offices directly from the incident sites or obtained from provincial agencies.

DATABASE: NATIONAL ANALYSIS OF TRENDS IN EMERGENCIES SYSTEM (NATES)

d) **Geographic Unit(s) of Measurement**

Individual spills.

e) **Period of Record**

1968 - present; most complete records post 1974.

f) **Update Frequency**

As required; incidence occurrences records available from headquarters database approximately one or two years after occurrence.

g) **Database Hardware/Software Configuration**

Mainframe computer with IP Sharp Associates (Toronto) database management system MABRA based on APL.

h) **Output Format(s) (tables, maps, etc.)**

Lists of incidences by constraints (defined parameters).
Tables of incident numbers by type and geographic area.

5. **Restrictions and Conditions**

Some information may be restricted.

6. **Price Information**

Cost recovery for organizations outside government. No charge within government (all levels).

7. **Corresponding Printed Sources**

No periodic publications; one summary report produced (see 11).

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Hazardous materials - accident
Spills - hazardous
Leaks - hazardous
Monitoring - hazardous materials

DATABASE: NATIONAL ANALYSIS OF TRENDS IN EMERGENCIES SYSTEM (NATES)

11. **Additional Information**

1. Database is being expanded to add more parameters.

2. Database will be transferred to the Departmental Office Technology System (DOTS) on ORACLE software in 1990. Incident information will then be available within a month of occurrence.

3. Ten year summary report: Summary of spill events in Canada, 1974-1983.

4. Publications available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario K1A 0H3.

May 1989

DATABASE: **CANADIAN COUNCIL OF RESOURCE AND ENVIRONMENT MINISTERS - NATIONAL PCB INVENTORY**

1. **Datafile Name(s)**

Undetermined.

2. a) **Summary Description of Contents**

National database of PCBs in equipment in use and in storage, and in waste.

b) **Purpose of the Database**

To support PCB regulations and the PCB phase out strategy.

3. a) **Name and Address of Responsible Organisation**

Waste Management Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Tom Foote (819) 953-1117

c) **Access Mechanisms**

Through the responsible agencies.

4. a) **Parameters Measured (summarized if too extensive)**

- owner information
- site information (address, postal code, geocode, contact person)
- equipment/waste information
  . equipment/waste type (transformer, capacitor, regulator, etc; plus barrels of soil, debris, light ballasts, oil, water, sludge, etc.)
  . equipment status (in use, in storage for future use, in storage for disposal, disposed)
  . capacity (litres or Kg)
  . number of units
  . total volume or weight (capacity x no. of units)
  . PCB type (askarel, contaminated mineral oil)
  . PCB concentration in contaminated mineral oil (ppm)
  . PCB contamination level of other wastes (ppm, or H/M/L/)
  . manufacturers serial number (in-use only)
  . EP PCB label number (in-use only)

b) **Geographic Coverage**

National, all provinces and territories.

c) **Data Acquisition Method(s)**

Reports from private or government agencies under compliance.

d) **Geographic Unit(s) of Measurement**

Site specific information.

e) **Period of Record**

1988 - present.

f) **Update Frequency**

Every six months.

g) **Database Hardware/Software Configuration**

Microcomputer, dBase-IV on DOS micro

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Currently information on waste is public, but in use information is confidential.

6. **Price Information**

Not yet established.

7. **Corresponding Printed Sources**

Semi-annual reports containing a complete inventory list are planned; periodic summary reports will also be prepared.

8. **Languages**

Reports will be bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Waste - PCB
PCB - in use, in storage
PCB contaminated materials
PCB equipment
Askarel
Contaminated mineral oil

11. Additional Information

1. This database is currently under development and not operational.

2. All data will be available to the public.

3. Currently data on PCBs in equipment in use or in storage in Ontario and Quebec are found in the databases RISC/ORPCB and RISC-QRPCB, respectively. These databases and those in other regional offices will become part of the national PCB inventory database.

4. A report entitled 'National inventory of PCB waste storage sites' was produced in 1988 by the Canadian Council of Resource and Environment Ministers. The data in it vary from sector to sector, are not standardized in a database framework and are outdated. The National PCB database under development will contain up to date information on PCB waste storage.

May 1989

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - ONTARIO REGION PCB INVENTORY (RISC - QRPCB)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

An inventory of PCB containing equipment in use or in storage in companies in Ontario.

b) **Purpose of the Database**

To support enforcement of PCB regulations and the PCB phaseout strategy.

3. a) **Name and Address of Responsible Organisation**

Environmental Protection, Conservation and Protection, Environment Canada, Ontario Region, 25 St. Clair Avenue East, Toronto, Ontario M4T 1M2.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Dave Pascoe (address in 3a) (416) 973-1071
Mr. Tedd Brien, Chemicals Control Division, Commercial Chemicals Branch,Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3. (819) 953-1669.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- company (name, address, phone number, industrial sector, contact, Ontario Ministry of Environment region)
- type of equipment (transformer, capacitor, etc.)
- PCB type (askarel, pyranol, inerteen, etc.) and amount
- location of PCBs within company
- use (in use, in storage)

b) **Geographic Coverage**

Ontario.

c) **Data Acquisition Method(s)**

Information from companies provided pursuant to legislation on the Canadian Environmental Protection Act obtained through inspections and voluntary submissions.

d) **Geographic Unit(s) of Measurement**

Individual companies.

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - ONTARIO REGION PCB INVENTORY (RISC - ORPCB)

e) **Period of Record**

Data include records from 1979 to present; database established in 1985.

f) **Update Frequency**

Irregular.

g) **Database Hardware/Software Configuration**

Compaq 286 with DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Contact organization responsible for release of data - some may be protected.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Summary data from Ontario are published as part of an annual national report (see 11).

8. **Languages**

National reports are bilingual; database is in English.

9. **User Aids Available**

None.

10. **Suggested Keywords**

PCBs - askarel
Waste generation - PCB
PCB equipment - in use, in storage

11. **Additional Information**

1. The database is slated for redevelopment by 1990 when it will become part of a national PCB database currently under development (see Canadian Council of Resource and Environment Ministers - National PCB Inventory Database).

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - ONTARIO REGION PCB INVENTORY (ORISC) OR (ORPCB)

2. Most recent annual report: National inventory of concentrated PCB (askarel) fluids (1985 summary update). 1986.

3. Reports are available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario K1A OH3.

May 1989

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - QUEBEC REGION PCB INVENTORY (RISC - QRPCB)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

An inventory of PCB containing equipment in use or in storage by companies in Quebec.

b) **Purpose of the Database**

To support enforcement of PCB regulations and the PCB phaseout strategy.

3. a) **Name and Address of Responsible Organisation**

Environmental Contaminant Division, Environmental Protection, Quebec Region, Conservation and Protection, Environment Canada, 1179 de Bleury Street, 2nd Floor, Montreal, Quebec H3B 3H9.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Bruno Lafortune (address in 3a) (514) 283-2347
Mr. Tedd Brien, Chemical Controls Division, Commercial Chemical Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3. (819) 953-1669

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- company (code, location, industrial sector)
- type of equipment (transformer, capacitor, etc.)
- PCB type (askarel, pyranol, inerteen) and amount
- location of PCBs within company
- use (in use, in storage)

b) **Geographic Coverage**

Quebec.

c) **Data Acquisition Method(s)**

Information from companies provided pursuant to legislation on the Canadian Environmental Protection Act obtained through inspections and voluntary submissions.

d) **Geographic Unit(s) of Measurement**

Individual companies.

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - QUEBEC REGION PCB INVENTORY (RISC - QRPCB)

e) **Period of Record**

1980 - present.

f) **Update Frequency**

Irregular.

g) **Database Hardware/Software Configuration**

HP minicomputer with Image 1000 and RTE - IVB (will be changing) operating system software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Contact agency responsible for release of data - possibly protected.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Summary data from Quebec were published as part of two annual national (see 11) in 1985, 1986. There are no plans for additional publications.

8. **Languages**

National reports are bilingual; database is in French.

9. **User Aids Available**

None.

10. **Suggested Keywords**

PCBs - askarel
Waste generation - PCBs
PCB equipment - in use, in storage

11. **Additional Information**

1. This database is slated for redevelopment by 1990. It will be on a microcomputer, probably with DBASE IV software and maintained in the regional office. Updates will periodically be sent to headquarters in Ottawa. As well it will form part of a national PCB database currently under development (see Canadian Council of Resource and Environment Ministers - National PCB Inventory Database.

DATABASE: RESTRICTED INFORMATION SYSTEM FOR CHEMICALS - QUEBEC REGION PCB INVENTORY (RISC - QRPCB)

2. Most recent annual report: National inventory of concentrated PCB (askarel) fluids (1985 summary update). 1986.

3. Reports are available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario K1A 0H3.

May 1989

DATABASE: REGISTER OF UNDERGROUND STORAGE TANKS AND SYSTEMS ON FEDERAL PROPERTY (RUST)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data on characteristics of underground tanks (including contents) on federal property.

b) **Purpose of the Database**

To describe underground storage tanks on federal property for effective management (maintenance, inspection, upgrading).

3. a) **Name and Address of Responsible Organisation**

Inventory Management Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Brydges (address in 3a) (819) 994-3129
Mr. Kelly Karr, Oil Gas and Energy Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3. (819) 953-1125.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- type of facility, ownership
- location, site sensitivity
- tank characteristics
  . capacity, contents, volume
  . year of installation
  . construction material
  . internal and external protection
- piping, pumping system
- leak record, monitoring program

b) **Geographic Coverage**

National, all federal property.

c) **Data Acquisition Method(s)**

Questionnaire.

d) **Geographic Unit(s) of Measurement**

Individual tanks.

e) **Period of Record**

December 1987 - present.

f) **Update Frequency**

Irregular.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

An annual report is planned, beginning in 1989.

8. **Languages**

The report will be available in English and French.

9. **User Aids Available**

Resister of underground storage tank systems on federal property software package user's guide, 1988.

10. **Suggested Keywords**

Petroleum Product Storage
Leaking Underground Storage Tanks
Oil Spills

11. **Additional Information**

1. The annual report and the report in 9 are available from the responsible organization.

2. The database is composed of separate databases held and maintained by each federal department with underground storage tanks. All have the same software configuration. The majority of tanks are on property of the departments of Transport, National Defence, and Public Works.

May 1989

DATABASE: OCEAN DUMPING DATABASE SYSTEM (ODDS)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from applications and permits for ocean dumping, including load and dumpsite monitoring and aquaculture information.

b) **Purpose of the Database**

To regulate ocean dumping and loading for the purpose of ocean dumping, to monitor compliance with the ocean dumping provisions of the Canadian Environmental Protection Act (CEPA) and to control aquaculture operations.

3. a) **Name and Address of Responsible Organisation**

Program Liaison and Issues Coordination Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. C. Kriz (819) 953-1699
Mr. Hal Nelson (604) 666-2947
Ocean Dumping and Contaminants Control, Environmental Protection, Pacific and Yukon Region, 3rd Floor, Kapilano - Park Royal South, West Vancouver, B.C., V7T 1A2

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- ocean dumping/loading
  - . permit details (number, permitee)
  - . dump sites (location, date)
  - . load site (location, date)
  - . material dumped
  - . trace metals in material
  - . organics in material
  - . enforcement activities
- aquaculture
  - . lease details
  - . effluent site
  - . species cultured
- monitoring samples

b) **Geographic Coverage**

Waters within Canadian jurisdiction under the ocean dumping control provisions of the Canadian Environmental Protection Act (CEPA).

DATABASE: OCEAN DUMPING DATABASE SYSTEM (ODDS)

c) **Data Acquisition Method(s)**

Individual permit applications.

d) **Geographic Unit(s) of Measurement**

Site specific details.

e) **Period of Record**

1989 - present

f) **Update Frequency**

As required.

g) **Database Hardware/Software Configuration**

Microcomputer with oracle software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

An annual report planned to summarize CEPA information will include data from this database.

8. **Languages**

Annual reports will be bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Waste - Ocean dumping/disposal
Waste - marine environment
Aquaculture - waste
Disposal at sea

DATABASE: OCEAN DUMPING DATABASE SYSTEM (ODDS)

11. Additional Information

1. This database is currently being evaluated with a view to replacing the Ocean Dumping Permit System (ODUMP) database. It will be more easily accessible and also contain information on aquaculture leases.

2. All ocean dumping permits are published in the Canada Gazette.

May 1989

DATABASE: OCEAN DUMPING PERMIT SYSTEM (ODUMP)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from applications and permits for ocean dumping including load and dump site monitoring.

b) **Purpose of the Database**

To regulate ocean dumping and loading for the purpose of ocean dumping, and to monitor compliance with the ocean dumping provisions of the Canadian Environmental Protection Act (CEPA).

3. a) **Name and Address of Responsible Organisation**

Program Liason and Issues Coordination Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A OH3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Paul Mudroch (819) 997-2046
Mr. Francis Cadoret, Inventory Management Division, Management and Emergencies Branch, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A OH3. (819) 953-1655.

c) **Access Mechanisms**

Through the responsible organization. Data available on-line with remote access.

4. a) **Parameters Measured (summarized if too extensive)**

- permit type
- loading details, dump sites, route to site
- dumping method, rate, quantity of material
- type of material dumped
- monitoring requirements and restrictions

b) **Geographic Coverage**

Waters within Canadian jurisdiction under the ocean dumping control provisions of CEPA.

c) **Data Acquisition Method(s)**

Individual permit applications.

d) **Geographic Unit(s) of Measurement**

Site specific details.

DATABASE: OCEAN DUMPING PERMIT SYSTEM (ODUMP)

e) **Period of Record**

1983 -1989

f) **Update Frequency**

As required.

g) **Database Hardware/Software Configuration**

Mainframe computer with System 2000
Database management using COBOL and FORTRAN

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Ocean Dumping Control Act annual reports produced (see 11).

8. **Languages**

Annual reports are bilingual.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Disposal at sea
Ocean dumping/disposal
Marine contaminants
Water quality monitoring - marine
Waste - marine environment

11. **Additional Information**

1. The database is located at the Department of Energy, Mines and Resources, Ottava.

2. Plans are underway to replace ODUMP with a more user friendly system (see Ocean Dumping Database System, ODDS).

DATABASE: OCEAN DUMPING PERMIT SYSTEM (ODUMP)

3. All permits are published in the Canada Gazette.

4. Most recent annual report: Keeping the ocean clean, 1986/87 Annual report; available from the responsible organization.

May 1989

DATABASE: COMPENDIUM (COMP)

1. **Datafile name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database providing information on common air pollutants summarized on an economic sector and provincial basis.

b) **Purpose of the Database**

To generate emission estimates for five common air pollutants for 10 year trend analysis.

3. a) **Name and Address of Responsible Organisation**

Inventory Management Division, Management and Emergencies Branch, EnvironmentalProtection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Frank Vena (819) 953-1656

c) **Access Mechanisms**

Through the responsible organization.

4. **Parameters Measured (summarized if too extensive)**

- sulphur dioxide
- nitrogen oxides
- carbon monoxide
- total hydrocarbons
- particulate matter

b) **Geographic Coverage**

National, all provinces and territories.

c) **Data Acquisition Method(s)**

Data calculated based on transportation and fuel consumption data from Statistics Canada, and production data from other sources.

d) **Geographic Unit(s) of Measurement**

Country, provinces, territories.

e) **Period of Record**

Database established in 1985, but data back to 1970 are included.

f) **Update Frequency**

Uncertain.

g) **Database Hardware/Software Configuration**

Microcomputer using DBASE IV software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Trends in Common Air Contaminants in Canada, 1970 - 1980. Report EPS 7/AP/17, available from the responsible organization.

8. **Languages**

The database contains only numbers.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Air contaminants
Emission factors - air

11. **Additional Information**

1. The data in this database resemble the data contained in the Residual Discharge Information System (RDIS) for the year 1980.

May 1989

RESIDUAL DISCHARGE INVENTORY SYSTEM (RDIS)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database of emission estimates for common pollutants from anthropogenic sources based on production and resource consumption data.

b) **Purpose of the Database**

To monitor emission rates of air contaminants for atmoshpheric modelling and policy making.

3. a) **Name and Address of Responsible Organisation**

Inventory Management Division, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Tony Kosteltz (819) 953-1654
Mr. Frank Vena (819) 953-1656

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- sulphur dioxide
- nitrogen oxides
- carbon monoxide
- total hydrocarbons
- particulate matter
- reactive volatile organic compounds
- ammonia

b) **Geographic Coverage**

National, 127 x 127 km grid coverage of all provinces and territories.

c) **Data Acquisition Method(s)**

Data are calculated based on plant permit data (provincial), transportation and fuel consumption data from Statistics Canada, production data from other sources, actual stack monitoring, and published emission rates.

d) **Geographic Unit(s) of Measurement**

127 x 127 km grids for area type sources and latitude and longitude for point source emissions.

DATABASE: RESIDUAL DISCHARGE INVENTORY SYSTEM (RDIS)

e) **Period of Record**

1985 (Historical data is available on a different system).

f) **Update Frequency**

Every four or five years.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE IV and RAMIS data management system.

h) **Output Format(s) (tables, maps, etc.)**

Tables available; maps may be produced in the future.

5. **Restrictions and Conditions**

Some plant specific data may be restricted.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Periodic publications (see 11)

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

None

10. **Suggested Keywords**

Base quantities (throughput)
Air contaminants
Source classification Codes (SCC)
Temporal and spatial resolution
Emission factors - air

11. **Additional Information**

1. Most recent report: Emission and trends of common air contaminats in Canada, 1980.

2. This database provides the raw data that are summarized in the EP database Compendium (COMP).

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - URBAN CENTRED REGIONS

1. **Datafile Name(s)**

Urban Centred Regions: Land Use 1981
Land Use update 1986

2. a) **Summary Description of Contents**

Land activity, land cover and agricultural capability data from 26 urban centred regions of Canada.

b) **Purpose of the Database**

To monitor land use changes and determine trends for urban centred regions with populations greater than 100 000 in Canada.

3. a) **Name and Address of Responsible Organisation**

Habitat and Land Use Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Gerry Lee (819) 953-1434

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- urban centre (e.g. St. Johns, Halifax, Montreal, Ottawa, Thunder Bay, Winnipeg, Victoria)
- land activity (conservation, commercial manufacturing, extraction, forestry, dwelling activities, ecological research, etc.)
- land cover (trees, shrubs, row crops, water, unclassified, unimproved grasslands, etc.)
- agricultural capability (capability classes based on soil characteristics, 9 subclasses of limitations; see report in 9 for more details).

b) **Geographic Coverage**

Twenty-six urban centred regions with more than 100 000 population in Canada; mapped at 1: 50,000.

c) **Data Acquisition Method(s)**

Air-photo interpretation and field verification for land activity/cover; agricultural capability data from Canada Land Inventory maps.

d) **Geographic Unit(s) of Measurement**

Urban centred regions.

e) **Period of Record**

1981, 1986

f) **Update Frequency**

There are no plans at present update this database.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software. Parts of the database available on SPANS.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables.

5. **Restrictions and Conditions**

None

6. **Price Information**

Costs may apply, depending on the nature of the request.

7. **Corresponding Printed Sources**

1. Factsheets (see 11 for examples).
2. Maps at 1: 500,000 for each of the 26 regions.

8. **Languages**

Fact sheets are available in both English and French; maps are bilingual.

9. **User Aids Available**

1. CLDS summary catalogue of data holdings.
2. CGIS/CLDS catalogue of data holdings.
3. Land use classification for land use monitoring. Working Paper 17, Lands. 1981.
4. Soil capability classification for agriculture. Report No. 2, 1972.
5. Agricultural land and urban centres. 1977.

10. **Suggested Keywords**

Urban Centres - Land use trends

11. **Additional Information**

1. This database is part of the Canada Geographic Information System (CGIS) database.

2. The boundaries of the urban regions are based on the 1976 census subdivisions.

3. Land use activity data were collected under the Canada Land Use Monitoring Program (CLUMP).

4. Factsheets have been produced from the database covering topics such as urbanization in the prairie provinces and urbanization of rural land.

5. Publication 1 in 7; and 3, 4 and 5 in 9, are available through the responsible organization. Publication 2 in 7 and 1 and 2 in 9 are available through the State of the Environment Reporting Branch; Canadian Wildlife Service, Environment Canada, Ottawa, Ontario K1A 0H3.

May 1989

DATABASE: NATIONAL HARVEST SURVEYS

1. **Datafile Name(s)**

National Harvest Survey, Species Composition Survey.

2. a) **Summary Description of Contents**

A national database providing information on hunter activity and migratory game bird kill.

b) **Purpose of the Database**

To determine harvest limits for the following year, and population trends for migratory game birds.

3. a) **Name and Address of Responsible Organisation**

National Wildlife Research Centre, Wildlife Toxicology and Surveys Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Richard Elliott (819) 953-1425
Mr. Brian Collins (819) 997-1361
Ms. Lucie Métras (819) 953-1426

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- federal migratory game bird hunting permit sales
- federal migratory game bird kill (species, age, sex)
- hunter activity (number of recreation days, seasonal and daily bag).

b) **Geographic Coverage**

National, including all provinces and territories.

c) **Data Acquisition Method(s)**

Hunter questionnaires and wing collections.

d) **Geographic Unit(s) of Measurement**

Data stored by 10 minute degree blocks, summarized by province and regional reporting zones.

e) **Period of Record**

1967 - present

f) **Update Frequency**

Annually, June 1.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software; data stored on magnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Tables

5. **Restrictions and Conditions**

Permit holder names are confidential.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

Annual report - Migratory game bird kill in Canada (see 11).

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

Migratory game bird hunters and hunting in Canada. CWS Report Series No. 43, 1978.

10. **Suggested Keywords**

Migratory birds - hunting
Waterfowl - hunting
Harvesting - hunting

11. **Additional Information**

1. Database will be transferred to a microcomputer by 1991.

2. Data are shared with the provinces and territories and the U.S. Fish and Wildlife Service, who may also produce publications.

3. Publications in 7 and 9 are available from the responsible organization.

May 1989

DATABASE: PESTICIDE REGISTRANT SURVEY

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Sales data for selected pesticides broken down by active ingredient, province and use pattern for southern Canada.

b) **Purpose of the Database**

To provide regional offices with data on the quantities of selected pesticides used in Canada.

3. a) **Name and Address of Responsible Organisation**

Chemicals Control Division, Commercial Chemicals Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Tedd Brien (address in 3a) (819) 953-1669
Mr. Tom Davis, Pesticides Directorate, SBI Building, Agriculture Canada, Ottawa, Ontario K1A 0C6. (613) 993-4544

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- volume of pesticide (kg/l)
- active ingredient (kg)
- company selling product
- product registration number
- market type (domestic, commercial, restricted products)
- use pattern (where, on what, what is to be controlled)
- form of product (solution, solid, emulsion)
- pesticide (covers herbicides, insecticides, fungicides, fumigants, preservatives)

b) **Geographic Coverage**

National, excluding the territories.

c) **Data Acquisition Method(s)**

Survey forms from companies; data collected confidentially under the Pest Control Products Regulations and the Canadian Environmental Protection Act.

d) **Geographic Unit(s) of Measurement**

Provinces (kg/active ingredient sold)

e) **Period of Record**

1981 - present.

f) **Update Frequency**

Annually.

g) **Database Hardware/Software Configuration**

Microcomputer with custom software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Except for the annual, general two page summary, the remainder of the data are confidential.

6. **Price Information**

There is no charge for the annual summary.

7. **Corresponding Printed Sources**

A confidential annual report with restricted access (those with a purpose under the Canadian Environmental Protection Act) is produced (see 11).

8. **Languages**

The annual report and the summary is in English.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Pesticides - sales volume
Environmental quality - pesticide use

11. **Additional Information**

1. Database access is restricted to those who have a purpose under the Canadian Environmental Protection Act.

2. Only data after 1985 are computerized.

3. The annual two page summary provides total sales data by province and national summaries for number of products sold for five general categories of pesticides. It also lists by name the herbicides, insecticides and fungicides that account for 80% of the total sales in these categories.

III. ENVIRONMENTAL QUALITY

DATABASE: NATIONAL AIR POLLUTION SURVEILLANCE NETWORK (NAPS)

1. **Datafile name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from a Canadian network of stations continuously monitoring common air contaminants.

b) **Purpose of the Database**

To identify national trends in levels of specific air pollutants; to monitor compliance with national objectives established in the Canadian Environmental Protection Act.

3. a) **Name and Address of Responsible Organisation**

Pollution Measurement Division, River Road Environmental Technology Centre, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. John Shelton (613) 998-4705

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- sulphur dioxide (SO_2)
- carbon monoxide (CO)
- ozone (O_3)
- nitrogen dioxide (NO_2)
- total suspended particulate matter
- inhalable particulate matter
- lead (Pb)
- nitrates
- sulphates

b) **Geographic Coverge**

National, approximately 140 monitoring stations in 55 Canadian cities, all provinces and territories are represented.

c) **Data Acquisition Method(s)**

Individual monitoring stations.

d) **Geographic Unit(s) of Measurement**

Site specific measurements.

DATABASE: NATIONAL AIR POLLUTION SURVEILLANCE NETWORK (NAPS)

e) **Period of Record**

1970 - present.

f) **Update Frequency**

Monthly.

g) **Database Hardware/Software Configuration**

Mainframe computer using custom software; data stored on magnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Tables of numbers.

5. **Restrictions and Conditions**

No confidentiality or access restrictions. Searches should be conducted for users by personnel of the Pollution Measurement Division.

6. **Price Information**

No charges for reasonably sized requests

7. **Corresponding Printed Sources**

Three reports are published:

1. National air pollution surveillance - Monthly summary
2. National air pollution surveillance - Annual summary
3. Special reports - as required

8. **Languages**

Reports are available in English and French. The database itself contains only numbers.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Air quality trends
Air contaminants
Urban air quality
Environment quality monitoring - air

11. **Additional Information**

1. The NAPS database resides on a commercial computer service bureau (Datacrown).

2. Data on all parameters are not necessarily available in all provinces and territories.

3. Publications listed in 7 are available from EP Publications, Conservation and Protection, Environment Canada, 12th Floor, Place Vincent Massey, Ottawa, Ontario K1A 0H3, or from the database contact person.

May 1989

DATABASE: NATIONAL WATER QUALITY DATABASE (NAQUADAT)

1. **Datafile Name(s)**

One file for each of five regions in Canada (see 11).

2. a) **Summary Description of Contents**

Data on water quality from surveys and monitoring of precipitation, surface water and groundwater across Canada.

b) **Purpose of the Database**

To store results from water quality surveys across Canada.

3. a) **Name and Address of Responsible Organisation**

Water Quality Branch, Inland Waters Directorate, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Peter Brooksbank (819) 997-3424

c) **Access Mechanisms**

Data currently available on disk or magnetic tape through the responsible organization or via remote access through DATAPAC.

4. a) **Parameters Measured (summarized if too extensive)**

Over 1 600 measured, but not at all sites, for example:

- aquatic organisms
  . fish (contaminants in tissue)
  . algae (growth, presence)
- sediments (nutrients, trace metals, DDT, 2,4-D, BOD, pH)
- bacteria (fecal coliform, fecal strep)
- chemical properties (trace metals, total phosphorus, pH, oxygen concentration)
- physical properties (depth, water table, discharge, light penetration)
- precipitation (pH, type)

b) **Geographic Coverage**

National, approximately 10 000 locations covering all provinces and territories.

c) **Data Acquisition Method(s)**

Monitoring stations, field surveys.

d) **Geographic Unit(s) of Measurement**

Site specific measurements.

e) **Period of Record**

1960 - present.

f) **Update Frequency**

Updated as new information is received (frequency of input varies from region to region).

g) **Database Hardware/Software Configuration**

Mainframe; System 2000 database management with JOBSUB utility; data stored on magnetic tape.

h) **Output Format(s) (tables, maps, etc.)**

Graphs, tables.

5. **Restrictions and Conditions**

Some of the data used in relation to the Canadian Environmental Protection Act may be restricted.

6. **Price Inforamtion**

See 11.

7. **Corresponding Printed Sources**

Data reports are no longer produced; numerous other publications prepared (see 11).

8. **Languages**

Publications produced are bilingual; language used in relation to databases is optional and there is a bilingual dictionary on the system.

9. **User Aids Available**

1. NAQUADAT dictionary of parameter codes, 1988.

2. Other guides currently available will soon be obsolete (see 11); new ones are in preparation and will be available when the user signs on the system.

10. **Suggested Keywords**

Water quality trends
Water contaminants, pollutants
Environmental quality monitoring - water
Water quality data

DATABASE: NATIONAL WATER QUALITY DATABASE (NAQUADAT)

11. **Additional Information**

1. NAQUADAT is a collection of 5 databases, one for each of IWD's five regions: Atlantic, Quebec, Ontario, Western and Northern, Pacific and Yukon.

2. Many site specific water quality data reports and the list of parameter codes are available from IWD Publications, Conservation and Protection, Environment Canada, 8th Floor, Place Vincent Massey, Ottawa, Ontario K1A OH3.

3. Remote access is currently available through DATAPAC; accounts and costs available through Department of Energy, Mines and Resources, Ottawa.

4. During 1989 the database will be transferred to the ORACLE database management system and a different computer (likely VACS) at Environment Canada.

5. Additional information on aquatic biology will be included in the database within 1989.

May 1989

DATABASE: COMMITTEE ON THE STATUS OF ENDANGERED WILDLIFE IN CANADA DATABASE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

The database contains information on nationally vulnerable, threatened and endangered species for which status reports have been produced.

b) **Purpose of the Database**

To assess the national status of selected plant and animal species to determine protection priorities and provide information relevant for developing recovery plans.

3. a) **Name and Address of Responsible Organisation**

Endangered Species and Transboundary Wildlife Division, Migratory Birds and Wildlife Conservation Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Sylvie Normand (819) 953-1408
Mr. Chuck Dauphiné (819) 953-1429

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- species name (Latin, common)
- taxonomic history
- distribution
- habitat description, ownership
- population biology
- population ecology
- management practices
- threats to survival
- legal status
- status assessment
- information sources
- status report author

b) **Geographic Coverage**

National, species in all provinces and territories.

c) **Data Acquisition Method(s)**

Status reports prepared by individuals or organizations.

DATABASE: COMMITTEE ON THE STATUS OF ENDANGERED WILDLIFE IN CANADA DATABASE

d) **Geographic Unit(s) of Measurement**

Species specific information.

e) **Period of Record**

1976 - present.

f) **Update Frequency**

Irregularly, as status reports are prepared or revised.

g) **Database Hardware/Software Configuration**

Hardcopy files.

h) **Output Format(s) (tables, maps, etc.)**

Text with accompanying figures and maps.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge for reasonably sized requests.

7. **Corresponding Printed Sources**

Annually two lists are produced:

1. All species and their status
2. New species and their status added during the current year, as well an annual report is prepared for the Federal-Provincial Wildlife Conference.

8. **Languages**

Most of the status reports are in English, others in French.

9. **User Aids Available**

A guide to preparing status reports is available (see 11).

10. **Suggested Keywords**

Vulnerable, threatened, endangered species.
Wildlife/plant species status.

11. **Additional Information**

1. A book on endangered species in Canada is being prepared by the Environmental Analysis and Reporting Division, State of the Environment Branch, CWS.

2. Other publications of the responsible organization include species recovery plans and detailed ecological studies of some species.

3. The lists in 7, the guide in 9 and other publications are available from the Distribution Section, CWS, 17th Floor, Place Vincent Massey, Ottawa, Ontario K1A 0H3.

4. Status of additional species is determined at the annual COSEWIC meeting in April based on information provided in status reports.

May 1989

DATABASE: NATIONAL REGISTRY OF TOXIC CHEMICAL RESIDUES

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database on toxic chemical levels in wildlife specimens collected in the field.

b) **Purpose of the Database**

To provide data on toxic chemicals in wildlife for use in determining contaminant effects and assessing trends in contaminant levels.

3. a) **Name and Address of Responsible Organisation**

Toxic Substances Evaluation and Monitoring Division, Wildlife Toxicology and Surveys Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s). Address (if different from 3a), Telephone Number**

Mr. Richard Turle (819) 997-1412
Mr. W. Jim Learning (819) 997-6122

c) **Access Mechanisms**

Through Head, Laboratory Services, via a National Registry of Toxic Chemical Residues Data Request Form available from the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- wildlife characteristics
  . species (bird, mammal, reptile, amphibian)
  . age
  . sex
  . breeding condition
- collection data (where, when, hov, by whom)
- specimen analysis methods (where, when, tissue)
- analysis results
  . common tissue parameters (% fat, % water)
  . contaminant levels (e.g. dioxin, organochlorine pesticides, PCBs, mercury, trace elements)
- sample storage (where, when, hov many)

b) **Geographic Coverage**

National, including all provinces and territories; some speciments from the U.S. and Central and South America.

c) **Data Acquisition Method(s)**

Laboratory analysis of specimens collected in the field.

d) **Geographic Unit(s) of Measurement**

Specimen specific measurements.

e) **Period of Record**

1963 - present.

f) **Update Frequency**

Continuous.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE software.

h) **Output Format(s) (tables, maps, etc.)**

Five formats will be available that provide different data (see guide 9).

5. **Restrictions and Conditions**

1. Data will be released unless they are pending publication by the original submitter; written permission from the latter is required for data release).

2. Other conditions concerning data use are given in the guide (9).

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

1. One summary report produced (11).

2. Toxic chemical residues catalogue series (5 regional volumes) - list of data organized by species, tissue, year, province and number of analyses for each chemical; most recent update was 1985.

8. **Languages**

Report in English; future repors will be available in French as well.

9. **User Aids Available**

1. A guide to the Canadian Wildlife Service national registry of toxic chemical residues. Technical Report Series, No. 27, CWS. 1987.

2. A guide to the Canadian Wildlife Service national specimen bank is in preparation.

10. **Suggested Keywords**

Wildlife toxicology
Toxic substances - wildlife

11. **Additional Information**

1. Summary report: Noble, D.G. and D.E. Elliott. 1986. Environmental contaminants in Canadian seabirds, 1968-1984: trends and effects. Technical Report Series No. 13. CWS, Ottawa.

2. Publications listed in 7 and 9 can be obtained from the responsible organization.

3. The guide in 9 summarizes the data available in the database (up to 1984) by species, chemical, geographical area, date and publication.

4. The database contains data on all species in the specimen bank, both those on which analyses have been performed and those that have not been analysed.

May 1989

DATABASE: THREATENED AND ENDANGERED SPECIES

1. **Datafile Name(s)**

None.

2. a) **Summary Description of Contents**

A national database that provides information on distribution, species biology and information sources for 73 threatened and endangered species in Canada, and data on the distribution of agricultural crops.

b) **Purpose of the Database**

To examine the relationship between the distribution of nationally endangered and threatened species and pesticide use.

3. a) **Name and Address of Responsible Organisation**

Toxic Substances Evaluation and Monitoring Division, Wildlife Toxicology and Surveys Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Karen Lloyd (819) 997-6073

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- species parameters
  . name
  . distribution
  . status
  . source of information
  . habitat type
  . limiting factors
  . activity during various months

- crop data
  . distribution of crops across Canada at the consolidated census subdivision level (from 1986 Census of Agriculture, Statistics Canada).

b) **Geographic Coverage**

All nationally threatened and endangered species as determined by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) (see 11).

c) **Data Acquisition Method(s)**

Species data obtained from status reports prepared for COSEWIC, individual researchers or other national databases at the National Museum of Natural Sciences.

d) **Geographic Unit(s) of Measurement**

- species distribution vary from individual sites to large ranges
- crop information is at the consolidated census subdivision level.

e) **Period of Record**

Data on species as available (usually from 1978 - present); data on crops from 1986.

f) **Update Frequency**

Annnually, as new species are designated by COSEWIC (see 11).

g) **Database Hardware/Software Configuration**

Microcomputer with SPANS and DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Maps, tables.

5. **Restrictions and Conditions**

Information on the exact locations of threatened and endangered species is restricted.

6. **Price Information**

No charge for reasonably sized requests.

7. **Corresponding Printed Sources**

COSEWIC reports; the database information is more recent for some species.

8. **Languages**

Database is in English.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Wildlife/flora - endangered/threatened species
Crop - environmental correlations

May 1989

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - FRUITLANDS

1. **Datafile Name(s)**

Fruitlands

2. a) **Summary Description of Contents**

Land activity, land cover and agricultural capability for prime fruit growing areas in southern Canada.

b) **Purpose of the Database**

To monitor changes in land use and cover in prime fruit growing areas in southern Canada.

3. a) **Name and Address of Responsible Organisation**

Habitat and Land Use Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Gerry Lee (819) 953-1434
Mr. Jean Séguin, State of the Environment Reporting Branch, CWS, Environment Canada, Ottawa, Ontario. K1A 0H3. (819) 953-1445.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- fruit growing area (Okanagan, Niagara, Annapolis, Quebec)
- land cover (trees, shrubs, row crops, water, unclassified, unimproved grassland, etc.)
- land activity (vineyards, orchards, pasture, commercial, manufacturing, extraction, forestry, dwelling activities, ecological research, etc.)
- agricultural capability (capability classes based on soil characteristics, 9 subclasses of limitations; see report in 9 for more details.

b) **Geographic Coverage**

Okanagan and Annapolis valleys, Niagara peninsula and southern Quebec; mapped at 1: 50,000.

c) **Data Acquisition Method(s)**

Air photo interpretation and field verification for land cover and activity data; agricultural capability data from Canada Land Inventory Maps.

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) - FRUITLANDS

d) **Geographic Unit(s) of Measurement**

Fruit growing areas.

e) **Period of Record**

1961, 1971, 1981

f) **Update Frequency**

No plans to update.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software.

h) **Output Format(s) (tables, maps, etc.)**

Tables, maps.

5. **Restrictions and Conditions**

None

6. **Price Information**

Data and services according to CWS cost recovery policy (see contact person for cost estimate).

7. **Corresponding Printed Sources**

1. Maps at 1: 50,000 for each of the four fruit growing areas.

2. Report on Okanagan Valley fruitlands (see 11).

8. **Languages**

Maps and fact sheet are bilingual; report is available in English or French.

9. **User Aids Available**

1. CLDS summary catalogue of data holdings.
2. CGIS/CLDS catalogue of data holdings.
3. Land Use classification for land use monitoring. Working Paper 17, Lands. 1981.
4. Soil capability classification for agriculture. Report No. 2. 1972.
5. Agricultural land and urban centres. 1977.

10. **Suggested Keywords**

Agriculture - fruitlands
Fruitlands - land use trends

DATABASE: CANADA GEOGRAPHIC INFORMATION SYSTEM (CGIS) FRUITLANDS

11. **Additional Information**

1. This database is part of the Canada Geographic Information System.

2. The boundaries of the fruit growing areas are based on the 1976 census subdivisions.

3. Land use activity cover data were collected under the Canada Land Use Monitoring Program (CLUMP).

4. Publication 2 in 7; and 3, 4 and 5 in 9, are available through the responsible organization. Publication 1 in 7; and 1 and 2 in 9, are available from the State of the Environment Reporting Branch, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario. K1A 0H3.

May 1989

DATABASE: IMPORTANCE OF WILDLIFE TO CANADIANS

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data from a sample of 100 000 Canadians on their wildlife related utilization and expenditures, based on a questionnaire circulated nationally by Statistics Canada.

b) **Purpose of the Database**

To assess the social and economic importance of wildlife to Canadians.

3. a) **Name and Address of Responsible Organisation**

Socio-Economic Division, Sustainable Development Branch, Canadian Wildlife Service, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Fern Filion (address in 3a) (819) 997-1360
Ms. Elaine DuWors (address in 3a) (819) 997-1303
Ms. Anne Haining Special Surveys Group, Labour and Household Survey's Branch, Statistics Canada, 56A Jean Talon Building, Tunney's Pasture, Ottawa, Ontario K1A 0T6 (613) 951-4592.

c) **Access Mechanisms**

Through the responsible organization; data tapes are available from Statistics Canada.

4. a) **Parameters Measured (summarized if too extensive)**

- participation in wildlife related activities (frequency, incidence, expenditures)
- attitude (interest, program support)
- activity type (consumptive, nonconsumptive, wildlife NGO involvement)
- wildlife groups (waterfowl, other birds, small mammals, other mammals)
- personal information on respondents (age, sex, education, urban/rural residence, personal income, marital status, relation to head of family, labour force status, industry, occupation)

b) **Geographic Coverage**

National, all provinces.

c) **Data Acquisition Method(s)**

Self-administered mail-back questionnaires to individuals.

d) **Geographic Unit(s) of Measurement**

Individual respondents.

DATABASE: IMPORTANCE OF WILDLIFE TO CANADIANS

e) **Period of Record**

1981, 1987.

f) **Update Frequency**

Every five years following the census schedule.

g) **Database Hardware/Software Configuration**

Mainframe computer with custom software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

The information must satisfy a minimum level of statistical reliability before being released.

6. **Price Information**

No charge by the Canadian Wildlife Service for advisory services; prices for tables or tapes available on request from Statistics Canada.

7. **Corresponding Printed Sources**

1981 report series are available and 1987 reports are in preparation (see 11).

8. **Languages**

Reports are bilingual.

9. **User Aids Available**

User guide available for the 1981 survey, in preparation for the 1987 survey.

10. **Suggested Keywords**

Wildlife - public attitudes
Wildlife - use
Wildlife - socio-economic value
Socio-economics - wildlife

11. **Additional Information**

1. All 10 provincial wildlife agencies co-sponsor the survey.

2. Five reports were produced based on the 1981 survey covering the following topics: highlights, user guide, recreational and economic significance (2 reports), demand for wildlife to the year 2001.

DATABASE: IMPORTANCE OF WILDLIFE TO CANADIANS

3. Four reports are planned based on the 1987 survey covering the following topics: highlights, user guide, recreational and economic significance, trends 1981-1987.

May 1989

IV. OTHER DATABASES

DATABASE: CHEMICAL EVALUATION DATABASE (CED)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A bibliographic database on priority substances of international coverage.

b) **Purpose of the Database**

To evaluate priority substances under the Canadian Environmental Protection Act.

3. a) **Name and Address of Responsible Organisation**

Chemicals Evaluation Division, Commercial Chemicals Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Dr. Don MacGregor (819) 953-1664

c) **Access Mechanisms**

Through the responsible organization. Data available via remote access (online).

4. a) **Parameters Measured (summarized if too extensive)**

Numerous recorded parameters related to environmental evaluation of chemicals such as:

- chemical name (chlorobenzenes, cadmium, phthalate esters, etc.)
- toxicity levels for fish, birds, invertebrates
- levels in the environment
- quantities in use
- bioaccumulation
- biochemical oxygen demand
- regulations
- methods of analysis (bioassays)

b) **Geographic Coverage**

International, with emphasis on Canada.

c) **Data Acquisition Method(s)**

Legal compliance requirements, monitoring and research, literature search, personal communications with experts.

DATABASE: CHEMICAL EVALUATION DATABASE (CED)

d) **Geographic Unit(s) of Measurement**

Varies widely among data entries.

e) **Period of Record**

Database became operational in 1987; documents included cover 1950 - present.

f) **Update Frequency**

Daily.

g) **Database Hardware/Software Configuration**

Microcomputer with IMMAGIC software.

h) **Output Format(s) (tables, maps, etc.)**

Tables and text.

5. **Restrictions and Conditions**

Some data are confidential such as those reported through regulation compliance.

6. **Price Information**

Contact responsible agency; price depends on request.

7. **Corresponding Printed Sources**

None.

8. **Languages**

Database entries in numerous languages. Database searchable in English only. Users manual and keyword index will initially be available in English only.

9. **User Aids Available**

Users manual and keyword index are being prepared.

10. **Suggested Keywords**

Chemicals evaluation
Chemical toxicity
Bibliographic database - chemicals
Environmental monitoring - toxic chemicals

DATABASE: CHEMICAL EVALUATION DATABASE (CED)

11. **Additional Information**

1. Each reference is listed in the database by abstracted key parameters of interest to environmental evaluation and a commentary/evaluation/ assessment of the data in the reference is provided.

2. The database is currently under development and will eventually cover at least 50 priority substances as well as numerous other chemicals.

May 1989

DATABASE: CHEMICAL PROFILES DATABASE - SCHEDULE II TRANSPORTATION OF DANGEROUS GOODS (CHEMPROF)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

National database covering over 900 pure chemicals under the Transport of Dangerous Goods Regulations including chronic, acute and aquatic toxicity information.

b) **Purpose of the Database**

To update regulations under the Transport of Dangerous Goods Act and to provide information on TDG chemicals.

3. a) **Name and Address of Responsible Organisation**

Waste Management Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A OH3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Luke Trip (address in 3a) (819) 953-3415
Ms. Vladimira Skubnik, Management and Emergencies Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A OH3. (819) 953-1657

c) **Access Mechanisms**

Through the responsible organization; data available on floppy disk.

4. a) **Parameters Measured (summarized if too extensive)**

- chemical name
- physical and chemical properties (melting point, solubility, specific gravity)
- aquatic toxicity (lethal concentrations for various aquatic species)
- acute toxicity (mammalian)
- chemical group (21 groups such as amines, halogenated chemicals, organic acids and esters, miscellaneous organics, pesticides, organo compounds)
- chronic toxicity for humans (carcinogenic, teratogenic data)
- United Nations chemical class (explosives, gases, flammable solids, radioactive, corrosive, etc.)
- hazard rank (1-highest to 3-lowest) within each class
- chemical abstract series number

b) **Geographic Coverage**

National, all provinces and territories; over 900 chemicals in the database.

DATABASE: CHEMICAL PROFILES DATABASE - SCHEDULE II TRANSPORTATION OF DANGEROUS GOODS (CHEMPROF)

c) **Data Acquisition Method(s)**

Literature survey.

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

1988 - present.

f) **Update Frequency**

Irregular.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Tables and text.

5. **Restrictions and Conditions**

None.

6. **Price Information**

Not yet determined.

7. **Corresponding Printed Sources**

None at present. Periodic publications may be produced in the future.

8. **Languages**

Text is in english.

9. **User Aids Available**

Menu provided with database.

10. **Suggested Keywords**

Hazardous waste
Chemical profiles
Transportation - dangerous goods

May 1989

DATABASE: DOMESTIC SUBSTANCES LIST (DSL)

1. **Datafile Name(s)**

Domestic Substances List, Non-Domestic Substances List.

2. a) **Summary Description of Contents**

A list of chemical substances imported into or manufactured in Canada between 1984 and 1986.

b) **Purpose of the Database**

To maintain a list of substances in Canadian commerce in order to determine whether a substance is existing or new to Canada. New substances are subject to reporting requirements prior to manufacture or import and are assessed pursuant to Canadian Environmental Protection Act (CEPA), Section 25-32. 3.

3. a) **Name and Address of Responsible Organisation**

New Substances Division, Commercial Chemicals Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A OH3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Ms. Valerie Douglas (819) 953-1666
Dr. Walter Zuk (819) 997-4336

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

Manufacturers and importers may claim confidentiality for any of the following parameters, but claim must be substantiated.

- substance name (exact chemical identify) (masked name for confidential substances)
- site of manufacture
- activity (import, manufacture)
- substance Chemical Abstracts Service Registry Number
- amount (imported or manufactured in 1986)
- use (absorbent, abrasive, coagulant, etc.)
- import destination (province/territory)

b) **Geographic Coverage**

National, all provinces and territories.

c) **Data Acquisition Method(s)**

Substance producers and importers voluntarily submit info to DOE, according to technical criteria developed by DOE, based on CEPA.

d) **Geographic Unit(s) of Measurement**

Individual substances.

e) **Period of Record**

1984 -

f) **Update Frequency**

Regularly following notification and assessment of substances and reaching certain volumes of import or manufacture as prescribed by regulation (effective Jan. 1, 1987).

g) **Database Hardware/Software Configuration**

Minicomputer (Microvax) with ORACLE software.

h) **Output Format(s) (tables, maps, etc.)**

Tables; available on compact disk, on tape, hard copy.

5. **Restrictions and Conditions**

Data on some substances are restricted.
Data will not be directly accessible. Consult the responsible manager.

6. **Price Information**

Not yet determined.

7. **Corresponding Printed Sources**

1. The final DSL will be in Canada Gazette II (see 11).
2. Periodic supplements will be prepared.

8. **Languages**

The list will be published in the Canada Gazette II and will be in both official languages.

9. **User Aids Available**

1. The final Canada Gazette II will contain user informatioin concerning the database.

2. Reporting for the domestic substances list. (1988). (Note: This is a guide to industry reporting for the DSL).

10. **Suggested Keywords**

Domestic substances list
Non domestic substances list
Liste intérieure
Liste extérieure

DATABASE: DOMESTIC SUBSTANCES LIST (DSL)

11. **Additional Information**

1. This database is under development.

2. A core (preliminary) list of chemicals used in Canadian commerce in 1984-1986 is being prepared based on submissions by about 150 Canadian companies. Following its review additions will be made by other manufacturers and importers. Notice of this larger list will be published in Canada Gazette I (1990) as the Provisional Domestic Substances List. During a 90 day review period for this list, corrrections and additions will be made and a list of non-domestic substances will be identified based on the U.S.T.S.C.A. list. This final list of domestic and non-domestic substances will be published in Canada Gazette II in 1990.

3. Substances introduced in Canadian commerce after January 1, 1987 will be added to the DSL only after notification and assessment requirements under the Canadian Environmental Protection Act are met.

4. The second publication in 9, available from the responsible agency, explains the procedure for reporting substances and a description of the process involved in developing the database.

May 1989

DATABASE: FUEL ADDITIVES DATABASE

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents Uses**

A national database on additives in liquid fuels produced or imported.

b) **Purpose of the Database**

To monitor chemicals added to liquid fuels to provide a basis for air emission regulatory policies (e.g. motor vehicle standards).

3. a) **Name and Address of Responsible Organisation**

Oil Gas and Energy Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Bernard Madé (819) 953-1135

c) **Access Mechanisms**

Through the responsible organization

4. a) **Parameters Measured (summarized if too extensive)**

- additive
  . name (ethylene glycol, ethylene dibromide, dyes, etc.)
  . total volume
  . concentration
- producer of additive
- fuel (gasoline, heavy fuel oils, jet fuels, diesel, furnace/stove oil)
- refinery
- importer

b) **Geographic Coverage**

National, all liquid fuel producers and importers in Canada.

c) **Data Acquisition Method(s)**

Data submitted by refineries and importers under the Fuel Information Regulations of the Canadian Environmental Protection Act - (CEPA).

d) **Geographic Unit(s) of Measurement**

Individual refineries/importers.

e) **Period of Record**

Information is available from 1978 - present, but database contains only the information on additives being used at present.

DATABASE: FUEL ADDITIVES DATABASE

f) **Update Frequency**

Likely once every two years.

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Tables.

5. **Restrictions and Conditions**

Database mainly contains confidential information.

6. **Price Information**

Not applicable.

7. **Corresponding Printed Sources**

1. None currently available.

2. A summary report is planned every one or two years, but most of the information in it will be confidential (see 11).

8. **Languages**

Reports in English.

9. **User Aids Available**

A report describing how the database is organized is planned.

10. **Suggested Keywords**

Liquid fuels - additives
Non-renewable resources - fuel
Energy - liquid fuels

11. **Additional Information**

1. About every two years a report will be sent to each company for verification. Based on the companies' responses, the database will be updated and a summary report produced.

2. Only new additives or substantial changes in previously used additives are required to be reported by producers and importers.

May 1989

DATABASE: INVENTORY OF CANADIAN NON-FERROUS FOUNDRIES

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database on production and facilities for non-ferrous foundries.

b) **Purpose of the Database**

To identify and characterize non-ferrous foundries in Canada.

3. a) **Name and Address of Responsible Organisation**

Mining, Mineral and Metallurgical Processes Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Bill Blakeman (819) 953-1105

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- company (name, address)
- metals used
- products (casting, valves, pumps, shipbuilding components, aircraft components)
- plant capacity (tons/month)
- size range of castings (pounds)
- non-ferrous alloy grades
- moulding facilities
- melting facilities
- pattern and machine shop facilities
- economic forecast
- information source

b) **Geographic Coverage**

National, all 103 foundries

c) **Data Acquisition Method(s)**

Information from available reports.

d) **Geographic Unit(s) of Measurement**

Plant specific information.

e) **Period of Record**

1987

f) **Update Frequency**

Updating not planned for the immediate future.

g) **Database Hardware/Software Configuration**

Paper file.

h) **Output Format(s) (tables, maps, etc.)**

Text.

5. **Restrictions and Conditions**

None.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

One report has been produced (see 11).

8. **Languages**

English text.

9. **User Aids Available**

None.

10. **Suggested Keywords**

Non-ferrous foundries - inventory. (Identification, locations, products).

11. **Additional Information**

1. The inventory summarizes data from a one-time national survey that gives no details on waste production or pollution controls. The industry is not regulated federally. This survey provides baseline data against which data from future surveys, if any, can be compared.

2. List of non-ferrous foundries is found in: Cameron, D. 1988. Inventory of the Canadian non-ferrous foundries, Environment Canada, Ottawa.

3. The publication above is available from the responsible organization.

May 1989

DATABASE: LEAD ADDITIVES IN GASOLINE (LAG)

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

Data on quantities and concentrations of lead additives in gasoline.

b) **Purpose of the Database**

To monitor compliance with the leaded gasoline regulations.

3. a) **Name and Address of Responsible Organisation**

Commercial Chemicals Branch, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A 0H3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Peter Harris (819) 953-1673

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- Quantities of Gasoline Produced in Canada and imported into Canada.
- Quantities of Lead added to Gasoline.
- Concentration of Lead in Gasoline.

b) **Geographic Coverage**

Canada

c) **Data Acquisition Method(s)**

Quarterly reports from refiners and importers.

d) **Geographic Unit(s) of Measurement**

Not applicable.

e) **Period of Record**

1974 - present

f) **Update Frequency**

Annual

g) **Database Hardware/Software Configuration**

IBM compatible microcomputer with DBASE III + software.

DATABASE: LEAD ADDITIVES IN GASOLINE-LAG

h) **Output Format(s) (tables, maps, etc.)**

Tables of numbers.

5. **Restrictions and Conditions**

Data submitted by refineries and importers is protected business information.

6. **Price Information**

No charge

7. **Corresponding Printed Sources**

None

8. **Languages**

English and French

9. **User Aids Available**

None

10. **Suggested Keywords**

Lead Additives in Gasoline.

11. **Additional Information**

None

May 1989

DATABASE: SULPHUR CONTENT IN LIQUID FUELS

1. **Datafile Name(s)**

Not applicable.

2. a) **Summary Description of Contents**

A national database providing information on the content of sulphur in liquid fuels produced or imported.

b) **Purpose of the Database**

To collect information on sulphur content of liquid fuels in order to estimate emissions from fuel consumption.

3. a) **Name and Address of Responsible Organisation**

Oil Gas and Energy Division, Industrial Programs Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A OH3.

b) **Contact Person(s), Address (if different from 3a), Telephone Number**

Mr. Bernard Madé (address in 3a) (819) 953-1135
Mr. Marc Deslauriers (819) 994-3069
Inventory Management Division, Management and Emergencies, Branch, Environmental Protection, Conservation and Protection, Environment Canada, Ottawa, Ontario. K1A OH3.

c) **Access Mechanisms**

Through the responsible organization.

4. a) **Parameters Measured (summarized if too extensive)**

- sulphur concentration (mg/l, annual weighted average)
- fuel (gasoline, heavy fuel oil, jet fuel, diesel, furnace/stove oil)
- amount of fuel produced/imported
- producer/importer

b) **Geographic Coverage**

National, all provinces and territories.

c) **Data Acquisition Method(s)**

Reported annually by fuel producers or importers under the Fuel Information Regulations (CEPA).

d) **Geographic Unit(s) of [illegible]surement**

Individual producers/importers.

e) **Period of Record**

1978 - present

DATABASE: SULPHUR CONTENT IN LIQUID FUELS

f) **Update Frequency**

Annually

g) **Database Hardware/Software Configuration**

Microcomputer with DBASE III + software.

h) **Output Format(s) (tables, maps, etc.)**

Tables

5. **Restrictions and Conditions**

The amount of fuel produced/imported is confidential.

6. **Price Information**

No charge.

7. **Corresponding Printed Sources**

1. A report summarizing 1978 - 1987 data should be available in 1989.
2. Annual reports are planned following 1989.

8. **Languages**

Reports are in English.

9. **User Aids Available**

None

10. **Suggested Keywords**

Energy - liquid fuels
Liquid fuels - sulphur content
Emissions - sulphur

11. **Additional Information**

1. The reports in 7 are available upon request form the responsible agency.

May 1989

DATABASE: CCREM ENVIRONMENTAL PROTECTION RESEARCH AND DEVELOPMENT INVENTORY

1. **Datafile Name(s)**

   Not applicable

2. a) **Summary Description of Contents**

   Information on ongoing and completed (last 3 years) R&D projects from federal and provincial governments, universities and some industries.

   b) **Purpose of the Database**

   A bibliographic reference for researchers to avoid duplication; facilitate technical transfer; basis for development of joint projects.

3. a) **Name and Address of Responsible Organisation**

   Environment Canada, Conservation and Protection, Technology Development and Technical Services Branch, Ottawa, Ontario K1A 0H3.

   b) **Contact Person(s), Address (if different from 3a), Telephone Number**

   Chris Banwell (819) 994-2152

   c) **Access Mechanisms**

   Through the contact person, also via contacts in Ontario and Quebec Ministries of Environment - maybe CAN/OLE in the future.

4. a) **Parameters Measured (summarized if too extensive)**

   Database contains descriptive information on individual research projects, for example:

   - project title
   - project objectives
   - funding sources, amount
   - responsible agency, individual(s)

   Over 1200 research projects are identified and described in the database.

   b) **Geographic Coverage**

   National

   c) **Data Acquisition Method(s)**

   Survey forms, Ontario and Quebec via diskettes.

   d) **Geographic Unit(s) of Measurement**

   Not applicable.

e) **Period of Record**

Ongoing projects + those that were completed in last 3 years, started in Sept. 1987.

f) **Update Frequency**

Annually

g) **Database Hardware/Software Configuration**

Micro computer based using Micro-Questel software.

h) **Output Format(s) (tables, maps, etc.)**

Information available on diskettes or paper copy.

5. **Restrictions and Conditions**

None

6. **Price Information**

Cost recovery policy to be implemented. If converted to CAN/OLE there will be a royalty charge to users.

7. **Corresponding Printed Sources**

One version of database printed in Oct. 1988, updating has started since then, some changes to projects listed plus new entries being added.

8. **Languages**

Projects entered in language of submission.

9. **User Aids Available**

None

10. **Suggested Keywords**

August 1989

APPENDIX 4

MODIFIED STRESS FRAMEWORK FOR ENVIRONMENTAL DATA ORGANISATION

This framework offers one way of organizing or categorizing various types of environmental data and statistics. It is presented here as a guide to data/parameter categories of interest to SOE reporting.

Category	Example Parameters
I. Environmental Assets	
A Water Resources	- Supply quantity and area statistics
B Land Resources	- Supply quantity and area by classification
C Forests	- Supply quantity and age statistics
D Fisheries	- Population and stock size statistics
E Wildlife	- Population and location statistics
F Non-renewable resources	- Mineral and location statistics
G Climate	- Meteorological statistics
H Oceans	- Oceanographic statistics
II. Agents of Environmental Change (socio-economic and natural activities)	
A Waste generation by sector and/or by waste type	
1. Mining and smelting	- Emissions, tailings production, effluent volumes
2. Manufacturing	- Emissions, waste generation, effluent discharges
3. Municipal	- Sewage effluent discharge, waste landfilled/incinerated
4. Energy	- Emissions, waste generation
5. Transportation	- Emissions, spills
6. Other	
B Environmental Restructuring	
1. Buildings	- Building starts and completions, land and habitat conversion
2. Transportation	- Corridor construction, airports, land and habitat conversion
3. Agriculture	- Land conversion, wetland drainage
4. Energy	- Dam construction, flooding
5. Other	

C Harvesting	
1. Fisheries	- Catches by fish, fishery, zone; trends
2. Agriculture Forestry	- Tree harvest by area; trend
4. Hunting and trapping	- Wildlife harvest by species, area; trends
D Depletion of non-renewable resources	- Mineral/ore/fuel production by region, province
E Natural Activity	- Major flood occurence - Major droughts - Major earthquakes and landslides - Trends in river and lake levels - Trends in atmospheric and oceanic conditions - Occurence and trends in forest disease conditions, forest fires
F Other	- Pesticide applications
III. Environmental Quality	
A Air	- Levels and trends in air pollutants by region/pollutant
B Water (freshwater, marine)	- Levels and trends in water polluting substances
C Food	- Levels and trends of contaminants in foodstuffs
D Human Health and exposure	- Toxic substance analysis in body fluids, tissues - Mortality and morbidity statistics
E Soil	- Organic matter content, erosion rates, salinization, acidity, etc.
F Precipitation	- Acid deposition rates
G Fish and Wildlife Populations	- Toxic substance analysis and trends, population dynamics, species diversity endangered species, occurrence of lesions, disease
H Forests	- Forest depletion rate, cutting, restocking, species diversity, disease pest and fire trends
I Landscape	- Critical land conversions (e.g. prime agricultural land), number and locations of protected areas and reserves
J Other	

SOURCE: Modified from Environment Canada, 1987. A study of Environmental Reporting in Canada. The Stakeholder Group on Environmental Reporting. Ottawa.

APPENDIX 5

SOE DATABASE SURVEY FORM

SOE DATABASE SURVEY FORM

1. a) Database Name and Acronym

   b) DATAFile Name(s)

2. a) Summary Description of Contents

   b) Purpose of the Database, Uses

3. a) Name and Address of Responsible Organisation

   b) Contact Person(s), Address (if different from 3a), Telephone Number

   c) Access Mechanisms

4. DETAILED DATABASE DESCRIPTION

   a) Parameters Measured (summarize if too extensive)

   b) Geographic Coverage

   c) Data Acquisition Method(s)

   d) Geographic Unit(s) of Measurement

(Continued overleaf)

e) Period of Record

f) Update Frequency

g) Database Hardware/Software Configuration

h) Output Format(s) (tables, maps, etc.)

5. **Restrictions and Conditions**

6. **Price Information**

7. **Corresponding Printed Sources**

8. **Language(s)**

9. **User Aids Available**

10. **Suggested Keywords**

11. **Additional Information**

Please complete and return by January 31, 1989 to:

Environmental Information Systems Division
SOE Reporting Branch
Environment Canada, 10th Floor, PVM
Ottawa, Ontario
K1A 0H3

For questions or clarifications, call:

Terence McRae, Environment Canada
Telephone: 819-997-4149
or
Bruce Mitchell, Statistics Canada
Telephone: 613-951-3742